



Weatherization Assistance Program

Policy and Procedures Manual

Indiana Housing and Community Development Authority

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SECTION 100

ELIGIBILITY AND APPLICATION

101 ELIGIBILITY DETERMINATION

The Weatherization Sub-Grantee's staff, or its subcontractor, is obligated to review and determine WAP eligibility status for anyone requesting an application. Clients may not be denied the right to submit a WAP application by the Weatherization Sub-Grantee or any of its subcontractors.

A dwelling unit shall be eligible for Weatherization assistance if it is occupied by a family unit:

- Whose income is at or below 200 percent of the poverty level (for DOE) determined in accordance with criteria established by the Director of Office of Management and Budget* and as approved by the Department of Health and Human Services, per the American Recovery and Reinvestment Act of 2009, Public Law 111-005. The ARRA Public Law continues to apply to DOE funded grants.
- Which contains a member who has received cash assistance payments during the twelve-month period under Title IV and Title XVI of the Social Security Act.
- **Who is eligible for assistance under the Low Income Home Energy Assistance Act of 1981, per 10 CFR 440.22 (a) (3).** (Indiana Weatherization's primary eligibility criteria per approved State Plan)
(NOTE: LIHEAP WX grant clients must adhere to the HHS requirement of 150% of the current OMB poverty income)

Denied EAP applications will be referred for eligibility under 10 CFR 440.22 (a) (1) and (2), as noted above. If a client is ineligible under the cited regulation, refer to section 103 for denial procedures and notice to appeal.

*At the beginning of each calendar year newly approved poverty guidelines for the program year are issued. To be consistent with the Energy Assistance Program (EAP) intake, Weatherization and EAP will both update their income eligibility guidelines annually on June 1st (using Federal Register/Volume 79, Number 14/Wednesday, January 22, 2014, on pages 3593-3594 and WPN 15-3).

102 DOCUMENTING ELIGIBILITY

IHCDA requires that all sub-grantees ensure client eligibility during the period in which services are delivered. Clients which are deemed eligible as a result of their LIHEAP eligibility will have their most recent application date transferred into their IWAP record upon import. Sub-grantees must ensure services are delivered within one year of the most current application date or the client's

income must be re-verified. Files of clients not categorically eligible through the Energy Assistance Program must contain a copy of the application and income documentation. Guidelines for household income calculation are found in the most current version of the Indiana Energy Assistance Program Operations Manual <http://www.in.gov/myihcda/eap.htm> or DOE Weatherization Program Notice 15-3, dated February 19, 2015.

Households that are categorically eligible have several of the required items in their EAP file. Information, such as income verification, does not need to be duplicated. During monitoring, IHEDA or any contracted monitoring entity reserves the right to inspect the EAP client income verification to insure client eligibility.

In the following circumstances, **exceptions** to the required documentation policy will be permitted:

1. Shelters – An application and eligibility determination is not required for shelters.
 - Agencies should determine the number of countable completions based on shelter regulations detailing that a weatherization provider may count each 800 square feet of the shelter as a dwelling unit or each floor level as one unit, as noted in 10 CFR 440.22(f).
 - An individual file **must** be kept for the shelter project.
 - This file must contain a copy of the shelter’s mission statement, occupancy type, and any documentation detailing the work measures installed and diagnostic and Health and Safety testing performed.
 - For IWAP reporting purposes, each completion should be counted as “Data Unavailable” when reporting income categories and demographics. The box “Demographics Not Available” must be checked at the bottom of the IWAP application page.
2. Multi-Unit Buildings – In the weatherization of multi-unit buildings, DOE regulations require that 66% (50% for duplexes and four unit buildings) of dwelling units in the building must be eligible households or will become eligible within 180 days as referenced in 10 CFR 440.22(b).
 - An application and eligibility determination are, therefore, not required for non-eligible or empty units.
 - For IWAP reporting purposes, each non-eligible or empty unit should be counted as “Data Unavailable” when reporting income categories and demographics. The box “Demographics Not Available” must be checked at the bottom of the IWAP application page.
 - For reporting purposes, each non-eligible or empty unit should be listed as “Data Unavailable” when reporting income categories and demographics. To ensure that the percentage requirement is met, a separate list must be maintained, indicating the eligible and non-eligible or empty units.
 - Sub-grantees should also note that when weatherizing a multi-unit building, the amount to be spent on the building is determined by the number of income eligible

units. (Example: When weatherizing a 20 unit building, if 15 of the units are eligible, you are only allowed \$**105,000.00** (15 x \$**7,000** (average base cost per home)) for the 20 units.)

- In order to weatherize an apartment, all units in the affected building must be weatherized regardless of the individual unit eligibility.
 - Sub-grantees must obtain consent from IHCD prior to proceeding to weatherize multi-dwelling units or apartments where five (5) or more units are contained within one building.
 - Consent must be requested in the form of an email sent to the Community Programs Manager and contain the following information:
 - Address of the multi-unit building
 - Current description (i.e. : total number/income qualified/vacant)
 - Proposed funding source(s)
 - Request and Community Program Manager's response should be included in unit file.
 - More information for weatherizing multi-family dwellings is located within DOE regulations on WAPTAC in 10 CFR 440 (Federal Regulations) and Weatherization Program Notice (WPN) 11-09.
3. A home that is weatherized while being renovated by a state or local government program must have a client file completed within 60 days of the completion of the work. The file must contain all proper verification documents to ensure that the client meets all eligibility criteria.

103 APPEALS PROCEDURE

When a Weatherization Sub-Grantee determines that a household is ineligible, the sub-grantee, within ten (10) working days, must provide a written denial to the client detailing the reason(s) for the denial and advising them of their right to appeal the decision. Weatherization sub-grantees must retain in the household file a copy of the denial letter with the appeal procedure that was sent to the client.

Pictures must be taken to document the conditions leading to deferral and must be placed in the client file.

IHCD strongly recommends that the **Applicant Notification Form** found in *Appendix Q* be the basis of any form created by the Weatherization sub-grantee to notify weatherization clients of their denial of services.

The right to appeal information provided to any denied household must contain the following two processes:

1. Local Review:

Local review involves the written policy of each Weatherization Sub-Grantee Program Manager for handling client complaints or appeals of program decisions. The final step in the local process should involve a written determination by the sub-grantee's Executive Director.

2. State Review:

State Review occurs when a denied weatherization applicant is not satisfied with the local sub-grantee's determination. The appeal must include the stated reasons for the Client's objection to the denial decision, which reasons must be based solely upon evidence supporting one (1) of the following circumstances:

- a. Clear and substantial error or misstated facts which were relied on in making the decision being challenged;
- b. Unfair competition or conflict of interest in the decision-making process;
- c. An illegal, unethical or improper act; or
- d. Other legal basis that may substantially alter the decision.

The applicant appeal must be made in writing and received by the Indiana Housing and Community Development Authority (IHCD) within ten (10) days of receipt of the sub-grantee's final decision. The applicant appeal is to be sent to the IHCD's Chief Community Programs Officer who, after review, will refer the appeal to the IHCD Compliance Attorney.

The Respondent will receive written acknowledgement of receipt of the appeal within five (5) business days of its receipt, noting the day the appeal was received. All pertinent material from the case will be requested from the Weatherization Sub-Grantee by the Compliance Attorney in order to make a determination. The applicant, as deemed appropriate, shall have the opportunity to review all documentation submitted to IHCD.

The IHCD Compliance Attorney will have forty-five (45) days from IHCD's receipt of the written request for appeal to review the file and make a determination. The decision of the IHCD Compliance Attorney is final.

104 FEDERAL PROGRAM REGULATIONS AND GUIDANCE

All federal program regulations and guidance can be found at www.waptac.org under "Rules & Guidance, Program Guidance" and "Rules & Guidance, Rules and Regulations". Additional historical facts, training and technical assistance, health and safety, energy education, conference presentations and webinars and public relations can be found under various topics. If Indiana has specifically issued Program Guidance, these notices can be found on the weatherization website at <http://www.in.gov/myihcd/weatherization.htm>

Each new program year, Department of Energy issues annual guidance that governs the upcoming program year. See www.waptac.org under Weatherization Program Notice Program Year-1 (ie WPN 15-1 for program year 2015). WPN 15-1 and WPN 15-2 were issued on January 16, 2015

SECTION 200

CLIENT FILES

201 WEATHERIZATION PROGRAM MANAGEMENT

All weatherization work must follow Department of Energy (DOE) rules and regulations unless exceptions are specifically stated in the policy manual, grant agreement and/or program guidance. Several exceptions are listed in section 500. Any deviation from DOE guidelines, the Indiana Weatherization Policy and Procedures Manual or the Indiana Weatherization Field Guide SWS-Aligned Edition must have written approval from the Community Programs Manager prior to working on a unit. This approval only applies to the unit for which the request was made. **A copy of the request and IHCD's approval** must be printed and placed in the client file.

202 REQUIRED FORMS

Client files must be kept in order to verify the work that has been completed and to track expenditures on each dwelling. Sub-grantees will be required to report completions and document which funding sources were used when more than one funding stream is utilized on any one dwelling. The documentation should detail the dollar amount of DOE and HHS (LIHEAP) grant funds spent on each home.

The file must also contain the paperwork necessary to document that proper procedures were followed in the performance of the work. Some forms, such as the application, are required in all client records. Other documents, such as the rental agreement, will only be contained in the files where applicable.

Required forms include:

- A client's **Energy Programs Application (EAP)** must be active at the time the weatherization services are provided and at the time of final inspection. An application is considered active for a twelve month period starting from the date of the approved application. If the version in IWAP is the most current, no paper copy is required. If a client has an expired application in IWAP and recently reapplied, a current paper copy is required in the client file. A paper copy from IWAP may be requested by IHCD program monitors when reviewing client files. Sub-grantees are required to utilize the most recent or current approved application. *Appendix A – EAP Application.*
- **Income documentation** verifying total household income for the twelve months prior to application should be available. If categorically eligible under EAP, income information does

not need to be copied for the weatherization file. For the purposes of monitoring, EAP files must be made available. Sub-grantees must use a form or method of income calculation that is consistent with guidelines as written in the most current version of the Indiana Energy Assistance Program Operations Manual, <http://www.in.gov/myihcda/eap.htm>. Because files are subject to review, both by state and federal agencies, it is imperative that case files accurately reflect the computation of household income.

- The **Zero Income Claimant Form** must be used to verify zero income for **each** household resident, age 18 and over, that claims no income for the 12 months prior to the application date. In addition to a completed form, each zero income claimant must have an attached wage inquiry or income summary from the local Workforce Development office. *Appendix R – Zero Income Verification Form*
- According to the U.S. Department of Energy WPN 13-3 under Section D Proof of Eligibility #3 Self Certification, zero income claimants must have a *notarized* affidavit claiming zero income for Low Income Weatherization Assistance. Effective November 5, 2012 IHCD requires a notarized Zero Income Claimant Form to be in each client's file who claims zero income. This form will be implemented in both the EAP and Weatherization programs on the same date. All agencies must use this form with all EAP appointments and mail-in applications after November 5, 2012.
- The sub-grantee may notarize the form at the time of the EAP Application. Incorporating the notary into the EAP application process is highly recommended, but not required. The EAP Program Manager may notarize the form if he or she is the sub-grantee's notary, even if the Program Manager processed the file. Regardless of the procedure used, the form must be notarized in compliance with Indiana Code 33-42-2-2, which requires the presence of the claimant when the form is notarized.
- The form may be signed by the Zero Income Claimant **or** the person who comes into your office to complete the application on behalf of the household. If the signatory is not the zero income claimant, the person must be listed as a household resident on the EAP application. The EAP program does not require a notarized signature to process the file. This is a Dept. of Energy provision for Weatherization clients.
- **Applicant Deferral Notification Letters** mailed to deferred weatherization clients must be included in each weatherization file. The notification must detail the process described in *Section 103* of the manual. Appendix Q should be your **deferral letter template** with your specific sub-grantee contact names and addresses and reasons for the deferral added. **This letter must be specific as to the reason(s) for the deferral, next steps for the client and a specific timeline for action. The deferred file must also include a properly completed Moisture Assessment Form and pictures, where applicable, of the deferral issue(s).** *Appendix Q – Applicant Deferral Notification Letter*
- **Landlord/Rental Agreement** detailing Weatherization Sub-grantee's rental policy, including minimum landlord contributions. The form must be signed by the landlord, client, and sub-grantee personnel.

- **Work Order** must be contained in each case file and must be specific to the housing type. The completed Work Order will contain relevant information about the work that was completed on the home. This **must** include the auditors findings and diagnostics results used to guide weatherization work. There are separate forms for site built homes and mobile homes. For homes where a NEAT or MHEA run is used as the work order, copies of the NEAT or MHEA run must be present in the client file. - *Appendix I – Work Orders.*
- **Certificate of Insulation** is a certificate from the installing contractor documenting the specifics about the amount, type and location of all insulation installed. This certificate must be posted in an appropriate location within the home [attic, near water heater, etc.] and a copy placed in the client file. *Appendix S – Certificate of Insulation*
- **Invoices for Work Completed** must be included in the client files. Invoices must be company invoices or on company letterhead and must include a detailed breakdown by material and labor and listing the date the work was performed.
- **Final Inspection Form** Effective April 1, 2015 sub-grantees are required to utilize Indiana's standardized final inspection form. This standardized form is required to meet the requirements of DOE's WPN 15-4. This inspection form will be utilized by both the Quality Control Inspector as well as IHCD's Community Programs Monitor. *Appendix X – Final Inspection Form*

Effective April 1, 2015 all final inspections in Indiana must be performed by a DOE **Quality Control Inspector (QCI)** certified individual. This is required for both DOE LIHEAP and State LIHEAP completions. A thorough review of the Final Inspection form should be done to ensure the client is fully aware of what they are signing and agreeing to. A signed copy must be left with the client.

If the client does not sign the final inspection form, the Weatherization Sub-Grantee must document the reason for the absence of the client signature. For example, a client who rents a home and moves before the final inspection can be completed and is therefore unavailable to sign the final inspection form. The Weatherization Sub-Grantee **must** document three written attempts to reach the client for signature, such as correspondence sent to forwarding address. If the client will not sign due to a lack of satisfaction with the work, the auditor should note client concerns. If work is done in a home and the auditor cannot return to conduct an inspection at any time in the process, the sub-grantee must take the aforementioned steps to contact the client. If the client is unreachable, the sub-grantee must contact the Community Programs Manager for Weatherization at IHCD and request approval for an alternate completion.

- **Heating System Form** must be completed during the initial inspection of the system on every home. Each section needs to be signed off and dated by the appropriate employee/contractor. The appropriate document should be utilized depending on heating system type.

Forms are available for Natural Gas Furnaces (App. K), Boilers (See www.incap.org), Oil Furnaces (See www.incap.org) and Electric Heating (App. O) and may be found in the Appendices or at <http://intelligentweatherization.org/>

- **Furnace Sizing Form** is to determine the proper heat load calculation when a new heating system is to be installed in the home. Also referred to as a Manual J, this form must be completed and placed in every file for a home in which a furnace is replaced. Forms may be found at <http://intelligentweatherization.org/>
- **New Furnace Installation Inspection Form** is to be used only when a new heating system has been installed. The purpose of this form is for auditors to follow a step by step process to evaluate if the new heating system has been installed properly and is running efficiently. This document should be completed by both the individual installing the furnace and the sub-grantee inspector. The form must be complete, signed and dated by the sub-grantee inspector prior to any vendor payment. This form is not intended to be used as the test instrument during the final inspection (QCI) of shell measures. The appropriate heating systems form should be utilized during the shell final inspection (QCI) with all testing information being recorded in the appropriate column. *Appendix G – New Furnace Installation Inspection Form*
- **Gas Cook Stove Form** documents the working condition of this appliance, if it is present. Any information regarding the appliance condition, operation, or repair must be noted on this form. *Appendix J – Gas Cook Stove*. Note: CO readings must be recorded before and after any repair or replacement.
- **Gas Appliance Inspection Form** lists the procedure for surveying all gas appliances in a household for proper venting, carbon monoxide production, combustion efficiency, and safe operation. It must be completed at the initial inspection, interim inspection (when necessary) and at final inspection (QCI). It must be signed and dated by the initial auditor, the person inspecting the repairs or performing the repairs and the QCI. See *Appendix K – Gas Appliance Inspection Form*.
- **DSTO Form** is the Daily Safety Test-Out Form to perform CAZ and gas appliance testing. The DSTO form must be onsite and filled out for each day shell work is performed on the unit. The most current form with multiple testing days can be found in the 2015 Field Guide SWS-Aligned Edition or *Appendix N – Daily Safety Test-Out Form*.
- **Client Consent Form** is a release of liability form that provides a waiver given by the occupant/owner of the dwelling to the local Weatherization sub-grantee providing weatherization services. The Client Consent must be thoroughly reviewed with the client prior to being signed by the client and a copy left with the client. All files **must** contain this signed form including initialed releases for lead, mold, smoke and carbon monoxide alarms. *Appendix H – Client Consent Form*.

- **Lead Paint Hazards Notification** requires that a weatherization client receive written explanation of the dangers of lead-based paint in the form of the EPA booklet, “Renovate Right: Important Lead Hazard Information for Families, Child Care Providers, and Schools.” This booklet can be found by going to the EPA’s website <http://www.epa.gov/lead/pubs/renovaterightbrochure.pdf> (July 2011). It is mandatory that the client receives the EPA booklet and initials the “Client Consent Form” in written acknowledgment of its receipt before weatherization work can begin on their home. *Appendix H.*
- **Mold Hazards Notification** requires that a weatherization client receive written notification of the potential health risks of mold and high moisture levels in the form of the EPA booklet, “Mold, Moisture, and Your Home.” This booklet can be obtained from EPA’s website <http://www.epa.gov/iedmold1/pdfs/moldguide.pdf> (Sept. 2010) This information has been combined with the Client Consent Form that is a release of liability and this notification must be signed before any work can begin on the home. *Appendix H.*
- **Indiana Moisture Assessment** lists moisture conditions that exist in the home at the time of initial audit before any weatherization measures were installed. These conditions must also be confirmed by the shell crew/contractor prior to performing their work. This form must be present in every file and be signed by the client, the energy auditor and the Retrofit Installer – Shell technician when complete Weatherization services are provided. In cases of deferral, the form must be signed by the client and the Energy Auditor and be included with the deferral documentation in the client file. *Appendix M – Moisture Assessment Findings Form.*
- **Fuel Switch Approval** documentation must be in the client’s file if applicable. A print out of the *approval email* from IHCD’s Community Programs Manager is the required documentation. A fuel switch must be requested prior to the start of work and must be requested for each fuel switch completed. Specific details required to perform a fuel switch can be found in Section 302.9.
- **Pictures of Lead Safe Work Practices (LSWP)** set-up and work performance on all homes built prior to 1978 where assumed or verified lead based paint will be disturbed.
- **A complete list of all agency staff and contractors** who have worked in the client’s home. This must include the full names of the auditor, crew members, contractor and contractor employees (both Shell and Mechanical). This information may be provided on the contractor invoice where appropriate.

PLEASE NOTE: If an employee of a sub-grantee is applying for assistance through the Weatherization program, a note must be included in the file indicating that the sub-grantee Executive Director has reviewed and approved their application.

SECTION 300

SERVICE PROVISION

301 CLIENT PRIORITIES

All weatherization work must follow Department of Energy rules and regulations unless exceptions are specifically stated in the Policy and Procedures Manual, grant agreement and/or program guidance. Several exceptions are listed in section 500. Any deviation from DOE guidelines, Indiana Policy and Procedures Manual or the Indiana Weatherization Field Guide SWS-Aligned Edition must have written approval from the Community Programs Manager prior to working on a unit. This approval only applies to the unit the request was made for and must be printed and placed in the client file.

Once eligibility has been determined, a sub-grantee must follow a client priority policy written in accordance with Federal regulation 10 CFR 440.16(b) which states that priority is given to households:

- With inhabitants who are elderly (age 60 years and older)
- With inhabitants who are children, which Indiana defines as people age 18 and under
- Persons with disabilities (as defined in the Indiana Energy Assistance Program Operations Manual)
- That are high residential energy users or that have a high energy burden (as established by the Indiana Energy Assistance Program matrix system)

Sub-grantees **must** use the Energy Assistance Program's (EAP) matrix point system as a first-level sort for client service because matrix scores account for the aforementioned priority criteria.

Sub-grantees that choose to expand upon the above listed methods for prioritizing clients must still adhere to federal regulation 10 CFR 440.16(b), develop written procedures, and seek approval of the methodology from IHCD's Community Programs Manager.

302 OVERVIEW OF WEATHERIZATION ACTIVITIES

Each home that receives weatherization will have measures installed that are specific to the needs of the home; however, the process by which those measures are determined is standard across the state as outlined within the DOE-approved Waiver Audit Priority Lists.

In brief, the following activities must be completed on every home that is weatherized:

- Previously Weatherized – For DOE funded weatherization, each unit must be evaluated

prior to weatherization to verify that such activities have not taken place at the unit after September 30, 1994. For LIHEAP funded weatherization, a unit is limited to re-weatherization for five years rather than the DOE date. **See Section 302.1 below for verification procedures.**

- An initial audit to determine which weatherization measures are most appropriate for the client's home. The initial audit also includes a health and safety evaluation.
- Health and safety measures must be completed to ensure the security and safety of the occupants and weatherization personnel working in the client's home. Detailed health and safety guidelines are found in section 303 of this document.
- General heat waste reduction measures so as to increase the energy efficiency of the home and reduce the household's energy burden.
- Client energy education to provide the occupants with the information and tools they need to protect the weatherization materials installed and actively participate in saving energy in their homes.
- An interim inspection is required to evaluate work performed on the mechanical systems if the home is a non-total electric home and received mechanical work beyond a clean and tune or if payment will be rendered prior to the final inspection. Interim inspections must be performed by a properly trained Energy Auditor, Quality Control Inspector or Retrofit Installer Mechanical. IHCDCA prohibits anyone inspecting their own work that results in payment from the sub-grantee.
- A QCI/final inspection to ensure that work was completed in a competent and professional manner, work was done in accordance with the approved procedures, that measures installed have yielded diagnostic and energy efficient improvements, and that all materials have been properly installed per **DOE and IHCDCA regulations**. Effective April 1, 2015, all weatherized homes must be final inspected by a certified DOE Quality Control Inspector (QCI) and utilize Indiana's standardized Final Inspection Form.
- Sub-grantee shall ensure that all Weatherization staff and sub-contractors who perform or provide Weatherization services to client homes receive and adhere to all standards as outlined in Indiana's Weatherization Field Guide SWS-Aligned Edition, Indiana's Weatherization Policy and Procedures Manual, the Department of Energy Weatherization Assistance Program State Plan for Indiana and other State Weatherization directives as applicable. It is the sub-grantee's responsibility to follow all work standards as outlined in the documents referenced in this paragraph as well as their responsibility to ensure Weatherization staff and sub-contractors receive these documents to guide the Weatherization work performed in client homes.
- Sub-grantee shall include language in sub-contractor contracts specifying that all Weatherization services will be performed to the standards outlined in the bullet point immediately preceding this one.

302.1 Previously Weatherized

DOE: Prior to any weatherization activity, a unit must be evaluated to determine whether previous weatherization services have been provided. For homes utilizing DOE funds, if services have been

provided **after September 30, 1994** the unit is not eligible for additional weatherization services utilizing DOE funds. Please reference WPN 13-1, section V.1.2. A “Reweatherized” unit falls into the category of time indicated above and described under 10 CFR 440.18(e)(2)(iii).

The following actions must be taken on each DOE unit prior to weatherization services to ensure that homes that have received weatherization services after September 30, 1994 are not re-weatherized:

1. Each client’s address must be entered into IWAP to identify whether the client’s home has been weatherized during or after 2000 (length of IWAP historical records);
2. Each client must be asked whether their home has been weatherized after September 30, 1994; and
3. A visual inspection of each home must be performed by an energy auditor to identify whether previous weatherization measures have been performed.

If there are no documented, verbal, visual, or physical evidence of previous weatherization services, the Sub-grantee may proceed with weatherization services on the unit.

If any of the above actions indicates or suspects that weatherization services have previously been rendered in a home, the Sub-grantee must check with the local agency that has historically provided weatherization services in the area to inquire about any records pertaining to services previously provided. Incumbent local agencies must cooperate with these inquiries from IHCD or from new weatherization service providers. Failure of any Sub-grantee to comply with any such request could result in immediate suspension of payments under its DOE grant agreement or termination of its grant agreement by IHCD.

LIHEAP: Prior to any weatherization activity, a unit must be evaluated to determine whether previous weatherization services have been provided. For homes utilizing LIHEAP funds, sub-grantees may provide weatherization services to a dwelling unit previously weatherized provided that it was at least **5 years** prior to the beginning of the current LIHEAP program year. (Example: Current LIHEAP grant year starts 10/1/15; 5 years prior to this date is 10/1/10 – the home would have to have received weatherization services through LIHEAP **prior** to 10/1/10 to be eligible for Weatherization services utilizing LIHEAP current year funds.)

The following actions must be taken on each LIHEAP unit prior to weatherization services to ensure that homes that have received weatherization services within the last five years as outlined above:

1. Each client’s address must be entered into IWAP to identify whether the client’s home has been previously weatherized and determine what the date is
2. Each client must be asked whether their home has been weatherized previously and when the weatherization took place
3. A visual inspection of each home must be performed by an auditor to identify whether previous weatherization measures have been performed.

If there are no documented, verbal, visual, or physical evidence of previous weatherization

services, the Sub-grantee may proceed with weatherization services on the unit.

If any of the above actions indicates or suspects that weatherization services have previously been rendered in a home, the Sub-grantee must check with the local agency that has historically provided weatherization services in the area to inquire about any records pertaining to services previously provided. Incumbent local agencies must cooperate with these inquiries from IHCD or from new weatherization service providers. Failure of any Sub-grantee to comply with any such request could result in immediate suspension of payments under its DOE award agreement or termination of its award agreement by IHCD.

302.2 Initial Audits

Prior to any weatherization activities, each eligible home must undergo a whole-home audit by a trained energy auditor (as defined in Section 600). Audits are conducted according to either the DOE-approved waiver audit priority list for site built homes or mobile homes or by performing a NEAT or MHEA run. (Refer to sections 302.6-302.7)

302.3 Interim Inspections

Each Weatherization Sub-Grantee is required to complete an interim inspection on every home that received mechanical repairs or replacements unless the repairs only consisted of a clean and tune or when a home is a total electric home. An interim inspection is an evaluation of the mechanical work completed and is required unless the work was completed by an Indiana Competent Retrofit Installer-Mechanical.

This interim inspection includes completing either the New Furnace Installation Inspection form or the post/interim column of the respective Heating System Evaluation form depending on measures performed. This inspection must be performed by a trained Energy Auditor, Quality Control Inspector or Retrofit Installer Mechanical (as defined in Section 600) and must be completed prior to payment to the contractor. IHCD prohibits anyone inspecting their own work that results in payment by the sub-grantee.

If a job cannot be completed within 45 days of invoice, an interim inspection must be performed to verify that the heating work is done correctly and so payment can meet the required deadline. It is recommended that the interim inspection, whenever possible, be done on the last day the mechanical contractor is in the home. This prevents trying to access the home without a contractor present to make any necessary changes or repairs.

302.4 Final Inspections

Each sub-grantee or its authorized representative is required to complete a pre- and post-inspection of each unit receiving weatherization. A dwelling unit may not be reported to DOE as completed until:

1. A final inspection has been performed in accordance with 10 CFR 440.16(g).
2. The final inspection has been performed by a DOE Quality Control Inspector as outlined in Section 600 and WPN 15-4.
 - Effective April 1, 2015 the final inspection must be performed by a certified DOE Quality Control Inspector (QCI).
 - Effective April 1, 2015 the individual performing the initial energy audit cannot perform the final inspection.
 - Any variance from this separation of duties must be approved in writing with specific details by IHCD's Community Programs Manager – Weatherization.
3. All materials have been properly installed.

In the event that a dwelling cannot be entered for final inspection, the client file must contain documentation of why the final inspection was not completed under normal circumstances and that an alternate final completion was approved, in writing, by IHCD. Multiple documented attempts must be made before the Weatherization Sub-grantee can request an alternate final completion. At a minimum, **three verifiable attempts** must be made to schedule a regular final inspection.

An alternate final completion will be allowable in rare circumstances and only if the Weatherization Sub-grantee can establish a justifiable reason for the request. This alternate final completion may include visual inspection with an infrared camera of the outside of the unit or other techniques as necessary to ensure that measures have been completed properly.

Before a dwelling with an alternate final completion can be counted as a completion, the Weatherization Sub-grantee must submit a written request for approval to IHCD's Community Programs Manager for Weatherization. The request should detail the specific circumstances related to the issue and why access to the dwelling has been denied or is unavailable. All appropriate documentation, such as letters to the client, should be included with the request. IHCD's Community Programs Manager will respond in writing to approve or deny the request for an alternate final completion or to request additional information. Until the written approval from IHCD is received, final claims cannot be submitted for the unit, nor can the dwelling be counted as a completion.

It is recommended that Weatherization Sub-grantees, whenever possible, complete the final inspection process on the last day that contractors or crews will be in the dwelling, as this eliminates the need to gain access to the unit after services have been rendered.

302.5 Client Energy Education

Client energy education is a mandatory measure under the audit priority list in Indiana. Knowledge about energy use and basic concepts behind energy conservation should be shared with each household during the initial client intake and continue throughout the weatherization

process. This continuous process enables occupants to see how their home acts as a system, their effect on that system, and how measures performed will keep them safe and comfortable while saving energy. IHCDCA provides sources of information to sub-grantee personnel such as energy conservation tips and brochures to use as aides while conducting energy education. Additional energy education material is available at WAPTAC.org and on the DOE website.

During 2015-2016 Weatherization funding cycles, IHCDCA will develop and/or provide updated and more enhanced energy education materials to their Weatherization sub-grantees.

302.6 DOE-approved Waiver Audit Priority List

Indiana uses priority lists for both site-built and mobile homes based on measures specified by the National Energy Audit Tool (NEAT) and the Manufactured Home Energy Audit (MHEA). The approved single family energy audit priority list is used for single family homes and 1-4 unit multi-family buildings. The approved mobile home priority list is used for mobile homes and manufactured housing. These priority lists are approved by DOE for the state of Indiana every five years for both audits. The most recent approval of the site-built and mobile home priority list was September 2011 with an approved amendment in April 2013. The current site-built and mobile home priority list will expire in September of 2016.

For clarification, DOE considers a modular home to be a mobile home. This means that MHEA would be the correct electronic audit tool for modular homes.

Each home must follow the designated measures on the respective priority list unless NEAT or MHEA is run on the home. Under no circumstances can a NEAT/MHEA run be mixed with the site built/mobile home priority list.

302.7 Single Family and Mobile Home Priority Lists

NEAT and/or MHEA can be used instead of the approved audit priority list in the following circumstances:

- When complicated housing stock make the audit priority list decision process unclear
- When an auditor is unsure how to prioritize measures needed in a home based upon budget constraints
- To cost justify furnace replacements or other measures for energy efficiency purposes
- As required by IHCDCA or DOE

Each home must follow the designated measures on the respective priority list unless NEAT or MHEA is run on the home. Please reference Appendix I of this document for Indiana's approved priority lists.

302.8 Multi-Family Audits

The following multi-family rules and regulations apply to both DOE and LIHEAP funded weatherization projects.

For energy audit purposes, DOE considers multi-family buildings to be those containing five dwelling units or more. For multi-family buildings containing less than 25 units (5-24 units), and the units are individually heated or cooled, a NEAT run must be performed to determine the proper work scope.

In order to weatherize an apartment, all units in the affected building must be weatherized. In Indiana this includes duplexes, buildings with three or four units and buildings with five or more units.

Sub-grantees must obtain permission from IHCD prior to proceeding to weatherize multi-dwelling units or apartments where five (5) or more units are contained within one building.

For multi-family buildings containing 25 or more units per building, sub-grantees must contact IHCD to begin the process of submitting data to DOE for approval prior to the start of work on the project. IHCD will run a multi-family audit using Targeted Retrofit Energy Analysis Tool (TREAT) software and submit the results to DOE for approval. This process will include, at a minimum, obtaining the following information as required by DOE and TREAT:

- Brief narrative with photos describing the building(s), including its age, its condition, number of units, spatial orientation(s), heating/cooling type (central or distributed) and condition, and any other notable conditions.
- Building assessment sheets, such as lighting inventory; heating/cooling equipment and controls; air leakage determination; water usage information; combustion/CO/CAZ testing; insulation type and levels; base load analysis; windows and doors type and orientation; health and safety concerns, etc.
- Weatherization statement of work, project timeline, projected costs (materials and labor) and any landlord contributions .
- Complete copy of the energy audit showing all inputs/outputs (or engineering assessments and report) including a narrative describing the methodology used to assess the building(s) (i.e. was every building individually audited, or were a sample audited and the others assumed to be the same).
- **Sub-grantees must obtain permission from IHCD prior to proceeding to weatherize multi-dwelling units or apartments where five (5) or more units are contained within one building.**

DOE, in conjunction with Oak Ridge National Laboratory (ORNL) and the Lawrence Berkely National Laboratory (LBNL), plan to roll out a Multifamily Tool for Energy Audits (MulTEA). Upon completion of this audit tool, IHCD intends to review the new tool with the intent to implement the tool into Indiana's Weatherization Assistance Program during the 2015-2016 Program Year.

More information for weatherizing multi-family dwelling is located within DOE regulations on WAPTAC, in 10 CFR 440 (Federal Regulations) and Weatherization Program Notice (WPN) 11-09.

302.9 Fuel Switching

According to the DOE fuel switching is only allowed on a case by case basis. DOE's WPN 13-5, Section 5.11 states: The DOE Weatherization Assistance Program does not permit the general practice of non-renewable fuel switching when replacing furnaces/appliances. However, DOE does allow the changing or converting of a furnace/appliance using one fuel source to another on a limited, case-by-case basis only. Please reference WAP Memorandum 011 for additional information and guidance.

Sub-grantees interested or needing to perform a fuel switch for furnaces or water heaters must request permission from IHCD's Community Programs Manager. Each request must be submitted via e-mail and contain thorough documentation explaining why the fuel switch is deemed necessary. The fuel switch and subsequent work on the home cannot take place until written approval is issued by IHCD. IHCD's response, approved or disapproved, must be placed in the client file for future reference. **Requests for fuel switching should include, but not be limited to: the following reason(s) the switch is needed, the current fuel source, the new or different fuel source, CAZ testing results, draft testing results where applicable and digital photographs where possible.**

In instances where sub-grantees wish to perform a fuel switch for energy efficiency reasons, the fuel switch request must include a properly completed NEAT or MHEA run.

The requirements outlined above apply to both DOE and LIHEAP funded Weatherization homes.

303 HEALTH AND SAFETY

It is imperative to ensure that weatherization activities do not cause or exacerbate health and safety problems for workers and clients. DOE-approved health and safety measures are undertaken to ensure that the pending weatherization work does not create dangerous living conditions for the client or Weatherization workers. Health and safety activities are remedied before, or because of, the installation of weatherization materials and must occur within reasonable cost boundaries that get the home to a condition where weatherization work can move forward or be completed. Please reference the Indiana Weatherization Field Guide SWS-Aligned Edition for additional guidance on Health & Safety requirements.

According to 10 CFR Part 440, allowable energy related health and safety actions are those actions necessary to maintain the physical wellbeing of both the client and/or weatherization worker where:

- Costs are reasonable as determined by DOE in accordance with the State's approved State Plan; AND
- The actions must be taken to effectively perform weatherization work; OR
- The actions are necessary as a result of weatherization work.

On their initial visit, energy auditors identify any hazards present in a home and determine whether the hazard poses a health danger to occupants, crews, or contractors. Homes where Health and Safety hazards are found that cannot be properly addressed within the scope of Weatherization funding will be deferred.

Indiana's Weatherization Assistance Program follows DOE's WPN 11-6 and WPN 11-6a to address Health and Safety issues.

303.1 Health and Safety Guidance

Health and safety issues must be remedied before, or because of, the installation of weatherization materials.

The following provisions apply to the health and safety issues listed further below, where applicable:

- In the case of replaced heating systems and water heaters, the replaced units will be disabled at the time of removal to prevent the appliance from being installed or used in a different location.
- Where hazards are identified, clients will be informed in writing of the hazards on the Moisture Assessment Form. A copy of the Moisture Assessment Form is kept in the client's file and is signed by the client, energy auditor and shell personnel.
- State and local codes or IHCD policy, whichever is most stringent, must be followed while installing health and safety measures.
- Crews and contractors installing health and safety measures must be trained per IHCD's Weatherization Training Competency as outlined in Section 600.

303.2 Allowable Actions, Testing, Client Education and Training

The following details specify Health and Safety systems and the approved State Plan method for allowable actions, testing, client education, and training.

303.2.1 Air Conditioning and Heating Systems

Action/Allowability:

“Red tagged”, inoperable or inefficient heating systems replacement, repair, or installation is allowed with DOE and LIHEAP funds. IHCD does not allow the installation or replacement of air conditioning systems. Repairs to an air conditioning system may only be made when current operations of the AC system endanger the operation of the furnace. Repairs can be charged to either DOE Health & Safety or LIHEAP Mechanical. The sub-grantee will first determine whether repairs can effectively be made to the heating system to enable it to be operating safely and within IHCD standards, rather than require a replacement. Sub-grantees are allowed to replace heating systems in circumstances, as follows:

- A verifiable condition exists that allows combustion gases to enter the living environment. For example, a breach in the heat exchanger that allows combustion gases to mix with the air in the ductwork.
- An improper application of a non-sealed combustion furnace, installed in a mobile home. Mobile homes are required to have furnaces that draw their combustion air from outside the carriage. The installation of a furnace in mobile homes that is intended for use in site built homes is not allowed.
- Inefficient furnaces can be replaced when a NEAT or MHEA run shows the replacement to meet a SIR of 1 or greater. If NEAT or MHEA shows the furnace replacement to have a SIR of 1 or greater the cost of the furnace replacement can be charged to the DOE Base line item. In these instances the NEAT or MHEA run becomes the work order and must be followed for the home.
- The cost of necessary repairs will exceed 50% of the cost of installing a new furnace.

Before a new furnace is installed in a weatherization dwelling unit, the proper size of the furnace must be determined. Sub-grantees will determine the correct output size of the replacement furnace using Manual J heat load calculations or equivalent method.

The load calculations performed within NEAT or MHEA are not considered to yield proper furnace sizing criteria within Indiana’s Weatherization Assistance Program.

Testing:

Health and Safety inspections ensure that the systems are present, operable, and performing. The health and safety inspection of combustion appliances, including heating systems, will include but not be limited to the following items:

- The rated and measured BTU input of each gas furnace.
- A complete electrical inspection of the furnace including proper grounding, polarity, wiring connections, fuse type and size, element amperage (electrical furnace), disconnect requirements and conduit requirements.
- An inspection of all gas lines in the home from the source to the gas appliances or line termination. This includes all fittings, connections, shut-off valves, gas valves, sediment traps and end caps.
- An inspection for spillage and a draft test of the gas furnace and water heaters (Completion of the Indiana Gas Appliance Inspection Form).

- A visual inspection for flame interference.
- A test of the setting and operation of the high limit control switch.
- An evaluation of the adequacy of combustion air for combustion appliances.
- An inspection ensuring there are no open returns or return air leakage within the Combustion Appliance Zone.
- Carbon monoxide testing of all gas appliances.
- An inspection and replacement if necessary, of the furnace filter.
- Worse case draft test (Completion of the Daily Safety Test-Out Form).
- ASHRAE 62.2 measurements and testing

Client Education:

Auditors will discuss and provide information on appropriate use and maintenance of heating systems.

Training:

Auditors receive extensive training in the evaluation of residential heating systems. IHCD heating systems forms document the condition and testing results of the heating system and are required to be in every client file.

303.2.2 Appliances and Water Heaters

Action/Allowability:

Replacement of water heaters is allowed on a case-by-case basis. Replacement and installation of other appliances, including gas cook stoves, are not allowable DOE health and safety costs. Replacement of gas cook stoves is only allowable with LIHEAP funds and in following appropriate LIHEAP program rules. Repair and cleaning of water heaters, stoves and furnaces are allowed with DOE and LIHEAP funds.

Indiana's Weatherization Assistance Program justifies water heater replacement for the following reasons:

- Existing water heater is leaking beyond repair hindering the Weatherization process from proceeding and causing continuing and worsening moisture conditions in the home,
- Gas burner deficiencies, venting issues [draft], interior baffle issues, or a combination of such that renders the gas water heater beyond repair and a health and safety hazard to the household, and/or
- Carbon monoxide production above Indiana's standards that cannot be lowered by cleaning, adjusting or repairing

Sub-grantees are required to document the reasons for replacing the water heater in the client file.

Testing:

Sub-grantees will determine whether water heaters are performing safely. Combustion safety testing is required on all gas water heaters. The health and safety inspection of combustion

appliances, including water heaters, includes the following items:

- An inspection of all gas lines in the home from the source to the gas appliances or line termination. This includes all fittings, connections, shut-off valves, gas valves, sediment traps and end caps.
- An inspection for spillage and draft of the gas furnace and water heater (Completion of the Indiana Gas Appliance Inspection Form).
- An evaluation of the adequacy of combustion air for combustion appliances.
- An inspection ensuring there are no open returns or return air duct leakage within the Combustion Appliance Zone.
- Carbon monoxide testing of all gas appliances.
- Check for a properly installed temperature and pressure relief valve on the water heater.
- Measurement and adjustment, if needed, of the water temperature.
- Worse case draft test. (Completion of Daily Safety Test Out Form as required)

Client Education:

Discuss and provide information on appropriate temperature setting, length of showers, use of low flow faucet aerators, low flow shower heads and proper maintenance of the water heater.

Training:

Auditors receive extensive training in the evaluation of combustion appliances, including water heaters. IHCDAs heating systems forms document the condition and testing results of all water heaters and are required to be in every client file.

303.2.3 Asbestos - in siding, walls, ceilings, etc.

Action/Allowability:

Removal, cutting or drilling of asbestos siding is not allowed. In homes where asbestos siding exists and exterior wall insulation is needed, IHCDAs recommends, where possible, insulating the walls from the interior of the home.

Testing:

Sampling and testing for asbestos may only be performed by Indiana licensed asbestos building inspectors.

Client Education:

Inform the client that suspected asbestos siding is present and how the presence of asbestos will affect the flow of Weatherization services.

Training:

Asbestos training is available at the Environmental Management Institute (EMI). Neither asbestos training nor certification is required by IHCDAs. As such, IHCDAs does not cover the cost for asbestos

training. Basic knowledge of asbestos is covered within the scope of other Weatherization trainings offered through INCAA.

303.2.4 Asbestos - in vermiculite

Action/Allowability:

When vermiculite is present, unless testing determines otherwise, take precautionary measures as if it contains asbestos. Safe practices include, but are not limited to, utilizing the appropriate personal protective equipment, limiting dust production, limiting foot traffic from the attic to the home, wetting the area to be disturbed and limiting the amount of vermiculite disturbed. Where blower door tests are performed, it is a best practice to perform pressurization instead of depressurization.

Testing:

Sampling and testing for asbestos may only be performed by Indiana licensed asbestos building inspectors.

Client Education:

Clients will be notified of the existence of vermiculite in the attic and basic precautions against disturbing the material.

Training:

Asbestos training is available at the Environmental Management Institute (EMI). Neither asbestos training nor certification is required by IHCD. As such IHCD does not cover the cost for asbestos training. Basic knowledge of asbestos in vermiculite is covered within the scope of other Weatherization trainings offered by INCAA.

303.2.5 Asbestos - on pipes, furnaces, other small covered surfaces

Action/Allowability:

Auditors receive training within other courses offered at INCAA instructing them on the appearance of asbestos tape and insulation. Upon finding these materials in homes the auditors should assume that these materials contain asbestos and use precautionary measures including, but not limited to, utilizing appropriate personal protective gear, limiting dust production and limiting disturbance of the material.

Testing:

Sampling and testing for asbestos may only be performed by Indiana licensed asbestos building

inspectors.

Client Education:

Clients should be instructed not to disturb suspected asbestos containing material.

Training:

Asbestos training is performed at the Environmental Management Institute (EMI). Neither asbestos training nor certification is required by IHCD. As such, IHCD does not cover the cost for training. Basic knowledge of asbestos is covered within the scope of other Weatherization trainings offered by INCAA.

303.2.6 Biological and Unsanitary Conditions - odors, mustiness, bacteria, viruses, raw sewage, rotting wood, etc.

Action/Allowability:

Biological and unsanitary conditions that cannot be remedied within reasonable Health and Safety expenditures will be reason for deferral.

Testing:

Auditors will conduct a sensory inspection for biological and unsanitary conditions during all inspections of the home.

Client Education:

Auditors will inform the client of observed conditions. Auditors will provide information on how to maintain a sanitary home and steps to correct deferral conditions where applicable.

Training:

Auditors receive training on how to recognize biological and unsanitary conditions and how to properly address these issues within the work scope development or deferral process.

303.2.7 Building Structure and Roofing

Action/Allowability:

Building rehabilitation is beyond the scope of the Weatherization Assistance Program. Homes with conditions that require more than incidental repairs will be deferred or repaired to a condition where weatherization can occur by using Owner Occupied Rehabilitation (OOR) or other funding sources when available. (See section 500 and [Section 900](#)). When OOR funds are not available the sub-grantee shall make every effort to refer the client to other known funding sources for

performance of the needed repairs.

Testing:

Auditors will conduct a visual inspection of the building structure and roofing. Auditors will ensure that access to areas necessary for weatherization is safe for entry and performance of assessment, work, and inspection.

Client Education:

Auditors will notify clients of structurally compromised areas.

Training:

Auditors are trained on how to identify structural and roofing issues.

303.2.8 Code Compliance

Action/Allowability:

Correction of preexisting code compliance issues is not an allowable cost in areas other than where weatherization measures are installed. State and local (or jurisdiction having authority) codes must be followed while installing weatherization measures. Condemned properties and properties where "red tagged" health and safety conditions exist that cannot be corrected under this guidance should be deferred or repaired with OOR funds when available (see section 500 and section 900). When moving the water heater to a new location, Indiana code requires the work be performed by a licensed plumber.

Testing:

Auditors will conduct a visual inspection for local code infractions or deficiencies.

Client Education:

Clients will be informed of observed code compliance issues.

Training:

Auditors are trained in how to determine what constitutes code compliance.

303.2.9 Combustion Gases

Action/Allowability:

All gas furnaces, space heaters, and water heaters must be properly vented to ensure all flue products exit the home. Flue systems must meet all code and IHCD requirements and be verified to vent properly by passing all IHCD required draft testing. Repair and/or replacement of vent

systems are an allowable cost for DOE Health & Safety and LIHEAP Mechanical funding.

The sub-grantee may not continue with weatherization work, particularly air sealing the structure, until the flue products are appropriately vented away from the living area and outside the structure. Appropriately vented means that the vent system meets all code and IHCD requirements and is verified to vent by passing all IHCD required draft and CAZ testing. In the case of a plugged or non-functioning vent on a combustion appliance, appropriate steps must be taken to repair or replace the vent system.

Testing:

All vent systems for gas furnaces, gas space heaters and gas water heaters will be visually inspected to verify code compliance and draft tested in accordance with IHCD regulations. These tests will require the following:

- Completing the Indiana Gas Appliance Inspection Form
- Completing the New Furnace Installation Inspection Form, where applicable
- Completing the Daily Safety Test Out Form

Client Education:

Auditors will inform clients that all gas furnaces have been tested and are working properly upon completion of the work.

Training:

Auditors receive extensive training in the evaluation of combustion appliances. All combustion appliances must be tested in accordance with IHCD requirements and the proper forms documenting test results placed in the client file.

303.2.10 Drainage - gutters, down spouts, extensions, flashing, sump pumps, landscape, etc.

Action/Allowability:

Major drainage issues are beyond the scope of the Weatherization Assistance Program. Homes with drainage issues that cannot be addressed within weatherization funding constraints are cause for deferral unless other funds are available to address the home's needs. Please refer to section 900.

Testing:

Auditors will conduct a visual inspection for drainage issues.

Client Education:

Auditors will inform clients of the importance of cleaning and maintaining drainage systems.

Training:

Auditors receive training on how to recognize drainage issues.

303.2.11 Electrical - other than knob-and-tube wiring

Action/Allowability:

Minor electrical repairs are allowed where the health and safety of the client is at risk or the repairs are necessary for Weatherization services to continue.

Testing:

Auditors will conduct a visual inspection for electrical issues. They will also conduct voltage drop and voltage detection tests when needed.

Client Education:

Auditors will provide information to clients on overloading circuits, electrical safety, and electrical risks.

Training:

Auditors are trained in how to identify electrical hazards and are knowledgeable of local codes for compliance.

303.2.12 Electrical - Knob-and-Tube Wiring

Action/Allowability:

Per the electrical inspection section of the 2015 edition of the Indiana Weatherization Field Guide SWS-Aligned Edition, auditors identify any knob and tube wiring found in the dwelling and test it to see if it is live. If it is spliced into conventional circuitry, auditors note the breakers or fuses controlling the circuit.

Live knob and tube wiring can never be covered or surrounded by insulation as a result of any weatherization measure. Boxing of knob and tube wiring prior to insulating is acceptable.

Existing insulation covering live knob and tube wiring should not be removed in order to box the knob and tube wiring.

Homes where the knob and tube wiring cannot be properly and safely addressed should be deferred until the electrical hazards can be repaired.

Homes where the knob and tube wiring will limit or prohibit proper air sealing and mechanical ventilation installation should be deferred until the electrical hazards can be repaired. Please reference section 900.

Testing:

Auditors will inspect for the presence and condition of knob-and-tube wiring and check for alterations that might create an electrical hazard. Voltage drop and voltage detection tests are allowed. Approved Variance Appendix Y

Client Education:

Auditors will provide clients with information on over-current protection, overloading circuits, and basic electrical safety and risks.

Training:

Auditors are instructed to avoid insulating over or dense packing around live knob and tube wiring while installing insulation in attics, floors, or walls.

303.2.13 Fire Hazards

Action/Allowability:

Correction of fire hazards is an allowable cost when necessary to safely perform weatherization.

Testing:

Auditors will check for fire hazards in the home during all inspections.

Client Education:

Auditors will inform the client of observed fire hazards.

Training:

Auditors are trained on how to recognize potential hazards and when removal is necessary.

303.2.14 Formaldehyde, Volatile Organic Compounds (VOCs), and other Air Pollutants

Action/Allowability:

Removal of pollutants that might create a serious health concerns are cause for deferral unless

other funds are available such as the OOR program (see section 500 and section 900). If removal cannot be performed or is not allowed by the client, the unit must be deferred.

Testing:

Auditors will conduct a sensory inspection for formaldehyde, VOCs, and other air pollutants.

Client Education:

Auditors will inform clients of the observed conditions and the associated risks. Auditors will provide the client written materials on safety and proper disposal of household pollutants.

Training:

Auditors are trained on how to recognize potential hazards and when removal is necessary.

303.2.15 Injury Prevention of Occupants and Weatherization Workers—measures such as repairing stairs and replacing handrails

Action/Allowability:

Workers must take all reasonable precautions against performing work on homes that will subject workers or occupants to health and safety risks. Minor repairs and installation may be conducted only when necessary to effectively weatherize the home; otherwise, these measures are not allowed.

Testing:

Auditors will observe if dangers are present that would prevent weatherization.

Client Education:

Auditors will inform clients of observed hazards and associated risks.

Training:

Auditors are trained to be aware of potential injury hazards and risks.

303.2.16 Lead Based Paint Refer to Section 310

303.2.17 Mold and Moisture

Action/Allowability:

The Weatherization Assistance Program is not a mold remediation program. The use of DOE funds

for removal of mold and other related biological substances is not an allowable weatherization expense. DOE funds cannot be used to test, abate, remediate, purchase insurance, or alleviate existing mold conditions identified during the audit, the work performance period, or the quality control inspection. Low cost or no cost measures to clean moisture damaged surfaces are allowed and may be charged to DOE Health and Safety or LIHEAP Mechanical. Houses with mold and moisture issues that require more than no cost or low cost measures must be deferred or remedied with the use of OOR deferral or similar funding. (See section 500 and section 900). The Energy Auditor, in cooperation with the sub-grantee, should determine, based upon the conditions of the home, if Weatherization Services will be provided to homes with mold and/or moisture issues.

Sub-grantees must measure indoor humidity levels and potential sources for excess moisture. Identified problems and sources are documented on the Moisture Assessment Findings form that is signed by the local Sub-grantee and client. The Indiana Moisture Assessment Form (Appendix M) lists moisture conditions that exist in the home at the time of initial audit before any weatherization measures were installed. The conditions must also be confirmed by the shell crew/contractor prior to performing their work. This form must be present in every file.

Testing:

Visual assessment is required and diagnostics, such as moisture meters, are recommended at initial audits and prior to final inspections. Mold testing is not an allowable cost.

Client Education:

Solutions for mold remediation and educational talking points are discussed with the homeowner and/or occupants to determine roles in creation of problems and/or mitigation. Occupants are given a copy of the Environmental Protection Agency (EPA) brochure, "A Brief Guide to Mold, Moisture, and Your Home" as part of the client education process.

Training:

Each sub-grantee's crews or contractors receive specialized training in moisture awareness, ventilation, indoor air quality, and mold hazards. A mold awareness course is offered by the training and technical service provider and teaches Weatherization technicians and auditors how to identify the conditions that promote mold growth. This class identifies treatment options for less extensive mold conditions and best Weatherization practices to prevent mold growth. This class also discusses the health aspects related to mold and moisture issues for both workers and clients. This course is intended to prepare technicians and auditors to know how to safely proceed with Weatherization services or when to defer the home until serious mold and moisture conditions have been eliminated. **Please reference section 900.**

303.2.18 Occupant Preexisting or Potential Health Conditions

Action/Allowability:

When a person's health may be at risk and/or the work activities could constitute a health or safety hazard, the occupant at risk will be required to take appropriate action based on severity of risk. Appropriate action could include but not be limited to removal of excessive trash and debris, proper cleaning of moisture damaged surfaces, or removal of an unapproved alternative heat source. Failure or the inability to take appropriate actions must result in deferral.

Testing:

Auditors must require the client to reveal known or suspected health concerns as part of initial application for weatherization. Auditors must screen occupant's health concerns and conditions during the initial audit.

Client Education:

Auditors provide clients information regarding any known risks.

Training:

Auditors are trained on how to screen for client pre-existing health conditions and to determine what action to take if the home is not deferred.

303.2.19 Occupational Safety and Health Administration (OSHA) and Crew Safety

Action/Allowability:

As of December 2013, Material Safety Data Sheets (MSDS) became known as Safety Data Sheets (SDS). Workers must follow OSHA standards and Safety Data Sheets (SDS) and take precautions to ensure the health and safety of themselves and other workers. Maintaining all appropriate SDS forms is required by IHCD for all sub-grantees and contractors. For more information on hazard communication standards please visit <http://www.osha.gov/dsg/hazcom/index2.html>.

Testing:

Sub-grantees must perform assessments to determine if crews are practicing and utilizing safe work practices.

Client Education:

Not applicable.

Training:

The OSHA 10 hour training is required for all weatherization workers. The OSHA 30 hour training is required for all crew leaders and HVAC personnel working alone. All new weatherization workers must receive the appropriate OSHA training within six months commencing 45 days from the date of hire. Please reference section 600.

303.2.20 Pests

Action/Allowability:

Pest removal is cause for deferral unless other funds are available to cover the cost of extermination. Please reference section 900.

Testing:

Auditors will assess the presence and degree of infestation and risk to workers.

Client Education:

Auditors will inform clients of the observed condition and associated risks.

Training:

Auditors are trained in how to assess the presence and degree of infestation, associated risks, and need for deferral. Pictures of areas that lead to a deferral must be present in the client file.

303.2.21 Radon

Action/Allowability:

Whenever site conditions permit, exposed dirt must be covered with a vapor barrier. In homes where radon may be present, precautions should be taken to reduce the likeliness of making radon issues worse. Radon abatement is not an allowable activity with DOE funds; major radon problems are deferred and referred to the appropriate local environmental agency.

Testing:

Radon testing is not currently required by IHCD.

Client Education:

Auditors discuss the potential existence of radon with the clients where appropriate.

Training:

Auditors are trained on what radon is, how it occurs, what factors might make it worse, and what weatherization measures can be helpful to radon control. Crews and contractors are trained in vapor barrier installation.

303.2.21 Smoke and Carbon Monoxide Alarms

Action/Allowability:

The installation of smoke and carbon monoxide alarms is an allowable expense with DOE and LIHEAP funds where alarms are not present or inoperable.

Testing:

Auditors will check existing smoke and carbon monoxide alarms for operation.

Client Education:

Auditors will provide the client with verbal and written information on the use of smoke and carbon monoxide alarms where necessary.

Training:

Auditors, crews, and contractors are trained on where to install smoke and carbon monoxide alarms.

303.2.22 Solid Fuel Heating (wood stoves, etc.)

Action/Allowability:

Maintenance, repair, and replacement of primary indoor heating units is allowed where a client's health and safety is a concern.

Testing:

Auditors must complete the solid wood fuel inspection form as part of their audit.

Client Education:

Auditors provide clients with safety information, safe operating instructions and general fire safety tips.

Training:

Auditors are trained on code requirements associated with solid fuel heating units.

303.2.23 Space Heaters - Stand Alone Electric

Action/Allowability:

Repair, replacement, or installation of electric stand-alone space heaters is not allowed. Removal of these space heaters is recommended. The energy auditor is required to perform a complete evaluation of the heating system on each home weatherized. Part of this evaluation will be determining what modifications or replacements are required. Stand-alone electric heaters cannot be left in place as a client's sole source of heat. If provisions cannot be made for the installation of a permanent heating source, the home must be deferred. In instances where a new heating system is installed, the client will be educated on the new heating system and advised against using the stand alone electric space heater. Should the stand alone electric space heater be found to be unsafe for use in the client's home, it must be removed from use prior to weatherization proceeding.

Testing:

Auditors check overall electrical safety of the home as part of their initial audit process.

Client Education:

Auditors must inform the client of hazards associated with the use of standalone electric space heaters and collect a signed waiver if removal is not allowed by the client.

Training:

Auditors are trained to inspect and identify electrical hazards based upon client use, code enforcement and current conditions in the home.

303.2.24 Space Heaters - Unvented Combustion

Action/Allowability:

Removal of unvented combustion space heaters is required, except as an emergency heat source as allowed by DOE WPN 08-4. Unvented space heaters are only allowed to remain in the home when meeting all requirements as outlined in the Unvented Gas Space Heater Inspection Form, Appendix L, IHCD's Policy and Procedure Manual. This form must be completed and placed in the client file where either an unvented space heater was removed or remains in the home.

Testing:

Carbon monoxide testing, combustion air requirements and completion of the Unvented Gas

Space Heater Inspection Form are required.

Client Education:

Auditors must inform the clients of the carbon monoxide dangers associated with unvented space heaters.

Training:

Auditors are trained on the dangers of unvented space heaters and how to determine if the unvented heater can be left in the home.

303.2.25 Space Heaters - Vented Combustion

Action/Allowability:

Vented gas combustion space heaters are an acceptable source of heat and must be tested the same as gas furnaces. Replacements, where necessary, follow the same guidelines as gas furnaces.

Testing:

Auditors must test vented space heaters in the same manner as a gas furnace and complete Indiana's Gas Appliance Inspection Form.

Client Education:

Auditors inform clients of the work performed to their space heaters, safe and efficient operating tips, and maintenance issues.

Training:

Auditors are trained on appropriate testing, operation and venting requirements for vented space heaters.

303.2.26 Spray Polyurethane Foam

Action/Allowability:

Use of two-part foam is acceptable where all applicable EPA, OSHA and IHCD requirements are followed.

Testing:

Auditors determine the most appropriate use for two-part foam based upon pricing, cost effectiveness and conditions in the home.

Client Education:

Auditors notify the client of the plans to use two-part foam and the precautions that may be necessary.

Training:

Auditors, crews and contractors are trained on the proper use, application and safety concerns for two-part foam.

303.2.27 Ventilation

Action/Allowability:

The most current ASHRAE 62.2 regulation is required to be implemented to the fullest extent possible on each home weatherized.

Effective October 1, 2014 Indiana adopted WAP Memorandum 007 which establishes a 15 cfm threshold for the installation of ASHRAE 62.2 ventilation. The following guidance is taken from WAP Memorandum 007:

The required mechanical ventilation rate, Q_{fan} , shall be the rate Q_{tot} in Section 4.1.1 plus the required additional airflow calculated in accordance with Section A3. If the airtightness of the building envelope has been measured, the required mechanical ventilation rate may be reduced as described in Section 4.1.2. In these cases, Section A3 shall be applied before Section 4.1.2 when determining the final mechanical ventilation rate. For existing buildings, if Q_{fan} is less than or equal to zero 15 cfm, then a whole-building ventilation fan is not required.

The above guidance does not prohibit sub-grantees from installing mechanical ventilation in homes requiring less than 15 cfm of ventilation. Homes requiring less than 15 cfm as outlined above must be evaluated for the need of mechanical ventilation. Homes where climatic conditions, moisture conditions, or client behavior demonstrate the strong need for mechanical ventilation, such ventilation should be installed.

Testing:

Each home is evaluated to meet the ASHRAE 62.2 standard at the initial audit. Fans installed as a result of ASHRAE 62.2 are tested for proper flow and adjusted to meet blower door readings at the time work is completed.

Client Education:

Auditors will provide clients with information on function, use, and maintenance of ventilation systems installed as a result of ASHRAE 62.2.

Training:

Auditors are required to complete ASHRAE 62.2 training which includes evaluation of the home, blower door testing, moisture assessments and completion of Indiana's ASHRAE 62.2 calculation form.

304 DEFERRAL STANDARDS

While clients may meet eligibility requirements for weatherization, Sub-Grantees may defer a client because the housing unit is not a good candidate for weatherization. A deferral may occur due to problems that are beyond the scope of weatherization such as condition of the structure, area is slated for redevelopment or health and safety reasons.

Deferrals may take place during any phase of the weatherization process, including but not limited to: during or after the initial audit, the work performance phase, or immediately following the identification of a health and safety risk to the occupants or to crew and contractors. Client must receive notice of the deferral and explanation in writing.

Postponement of work is advisable until deferral issues can be resolved either by the client and/or by alternative sources of assistance. Below are examples of existing conditions under which a dwelling unit can be deferred until certain corrective actions occur:

- Elevated carbon monoxide levels where abatement is not possible using WAP funds
- Existing moisture problems that cannot be resolved under the health and safety limits
- Unit with sewage or other sanitary problems that not only endangers the client, but the workers who will perform the weatherization work
- Occupant's health condition
- Building's structure or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that failure is imminent and these conditions cannot be resolved in a cost effective manner
- Client is uncooperative, abusive, or threatening to crew, subcontractors, auditors, inspectors, or others who must work on or visit the unit
- Extent and condition of lead-based paint in the house would potentially create further health and safety hazards
- The unit has been condemned or electrical, heating, plumbing, or other equipment has been "red tagged" by local or state building officials or utilities.
- The unit is in foreclosure, for sale or condemned and the owner will not be occupying the unit throughout the duration of the weatherization work.
- Any existing condition that could endanger the health and/or safety of the work crew or subcontractor and cannot be safely abated within the scope of weatherization

All agencies will pursue alternative funding resources to reduce the occurrence of deferral. Agencies should establish lines of communication with other funding sources so that referrals can occur in an efficient manner. The following is a list of potential funding sources to help remedy situations in a home:

- U.S. Department of Housing and Urban Development (HUD) - HOME Program
- HUD - Community Development Block Grant

- U.S. Department of Health and Human Services - Community Services Block Grant
- U.S. Department of Agriculture - Rural Economic Community Development
- State-funded housing and rehabilitation programs
- Low-income program funds provided by local utilities
- City-funded housing and rehabilitation programs
- Donations or financial participation from landlords
- Donations from local churches or community groups
- **State LIHEAP funds as outlined in section 900**

All clients who are deferred must receive a letter outlining the reason(s) for the deferral. A copy of the deferral letter must be placed in the client file. The deferral letter must be specific as to the reason(s) for the deferral, outline next steps for the client, and provide a timeline for action.

Any client who has received a deferral by a local sub-grantee must be allowed to pursue an appeal. The appeal will follow the established procedure set forth in the Section 103 of this manual.

The costs associated with deferred audits are an allowable charge under Base Program Operations. Those agencies using contractors must be able to document on the deferral invoice that the charge was for a deferred home and is not attributable to any particular completion.

Pictures must be taken documenting the conditions leading to deferral and must be placed in the client file.

305 REWEATHERIZATION

DOE: Prior to any weatherization activity, a unit must be evaluated to determine whether previous weatherization services have been provided. For homes utilizing DOE funds, if services have been provided **after September 30, 1994** the unit is not eligible for additional weatherization services utilizing DOE funds. Please reference WPN 13-1, section V.1.2. A “Reweatherized” unit falls into the category of time indicated above and described under 20 CFR 440.18(e)(2)(iii).

The following actions must be taken on each DOE unit prior to weatherization services to ensure that homes that have received weatherization services after September 30, 1994 are not re-weatherized:

1. Each client’s address must be entered into IWAP to identify whether the client’s home has been weatherized during or after 2000 (length of IWAP historical records);
2. Each client must be asked whether their home has been weatherized after September 30, 1994; and
3. A visual inspection of each home must be performed by an auditor to identify whether previous weatherization measures have been performed.

If there are no documented, verbal, visual, or physical evidence of previous weatherization services, the Sub-grantee may proceed with weatherization services on the unit.

If any of the above actions indicates or suspects that weatherization services have previously been rendered in a home, the Sub-grantee must check with the local agency that has historically provided weatherization services in the area to inquire about any records pertaining to services previously provided. Incumbent local agencies must cooperate with these inquiries from IHCD or from new weatherization service providers. Failure of any Sub-grantee to comply with any such request could result in immediate suspension of payments under its DOE award agreement or termination of its award agreement by IHCD.

LIHEAP: Prior to any weatherization activity, a unit must be evaluated to determine whether previous weatherization services have been provided. For homes utilizing LIHEAP funds, sub-grantees may provide weatherization services to a dwelling unit previously weatherized provided that it was at least **5 years** prior to the beginning of the current LIHEAP program year. (Example: Current LIHEAP grant year starts 10/1/15; 5 years prior to this date is 10/1/10 – the home would have to have received weatherization services through LIHEAP **prior** to 10/1/10 to be eligible for Weatherization services utilizing LIHEAP current year funds.

The following actions must be taken on each LIHEAP unit prior to weatherization services to ensure that homes that have received weatherization services within the last five years as outlined above:

1. Each client's address must be entered into IWAP to identify whether the client's home has been previously weatherized and determine what the date is
2. Each client must be asked whether their home has been weatherized previously and when the weatherization took place
3. A visual inspection of each home must be performed by an auditor to identify whether previous weatherization measures have been performed.

If there are no documented, verbal, visual, or physical evidence of previous weatherization services, the Sub-grantee may proceed with weatherization services on the unit.

If any of the above actions indicates or suspects that weatherization services have previously been rendered in a home, the Sub-grantee must check with the local agency that has historically provided weatherization services in the area to inquire about any records pertaining to services previously provided. Incumbent local agencies must cooperate with these inquiries from IHCD or from new weatherization service providers. Failure of any Sub-grantee to comply with any such request could result in immediate suspension of payments under its LIHEAP award agreement or termination of its award agreement by IHCD.

A "rework" is different from a "reweatherized unit" and is defined in Section 309.

306 RENTAL PROCEDURES

The benefits of weatherization to the occupants of rental units are protected in accordance with 10CFR440.22(b)(3). Indiana's policy for the weatherization of rental units complies with 10CFR440.16(i), and all other pertinent regulations.

Sub-grantees must have the following procedures in place before proceeding with weatherization of a rental unit:

1. Written permission of the building owner or his agent before commencing;
2. Benefits of the services accrue primarily to the low income tenants residing in such units;
3. For a reasonable period of time after completion, the household will not be subjected to rent increases;
4. No undue or excessive enhancements shall occur to the value of the dwelling unit
5. A landlord agreement/affidavit as required by the Sub-grantee and
6. The low-income tenants must benefit from the Weatherization services.

Sub-grantees are required to have and abide by their written policies detailing the terms of the landlord/tenant agreement and any landlord contribution policy the sub-grantee has adopted.

Landlords may be required to contribute financially toward the cost of completing a unit, and/or to complete specific work on the unit. In cases where the landlord meets the definition of low income, and is eligible for services, the sub-grantee cannot require financial participation on the part of the landlord. Furthermore, sub-grantees will ensure that clients realize the benefits from the weatherization work. Sub-grantees may also include in their landlord policy a provision that does not require a landlord contribution if the landlord is a 501(c)3 non-profit organization.

Landlord agreement forms must be included in the files of all weatherized rental units. At a minimum, landlord agreements must state that:

- For a one-year period after the weatherization work on the unit is completed, rent cannot be increased, unless the increase is not related to weatherization services performed, as noted in 10CFR440.22(b)(3)(ii).
- Landlord and/or other contributions shall be expended in accordance with the agreement between the landlord and the weatherization sub-grantee, as noted in 10CFR440.22 (d).
- Written permission of the landlord, or the landlord's agent, must be obtained prior to the weatherization of the dwelling.

Landlord contributions are not to be counted as program income, but must be applied to the program in one of two ways.

- Agencies that require landlord contributions must use a net system when charging weatherization. As an example, if the cost of the work is \$4,000.00, and the landlord contributes 50%, or \$2,000.00, weatherization may be charged for only the remaining \$2,000.00.
- Agencies that do not require landlord contributions, but receive contributions without stipulations as to their use, must then use those funds to enhance the weatherization program.

Sub-grantees are required to develop a written appeals process for dealing with rental units. The process should be available to resolve disputes over raising rent following the weatherization process.

The primary purpose of the weatherization program is to lower the total residential energy expenditures of low-income persons. Agencies are to ensure that no undue enhancement shall occur to increase the value of the dwelling units, as noted in 10CFR440.22 (b) (3)(iv). Undue enhancement is defined by DOE as any improvement to the property that goes beyond the scope of energy conservation work.

Agencies are not required to place liens on rental property that has been weatherized, but must ensure protection of the low-income household from improper eviction or sale of property. Agencies must be aware of the legal protection available and be prepared to make appropriate referrals when necessary.

307 NEW CONSTRUCTION

Under no circumstances shall weatherization funds be used on newly constructed units.

308 REFRIGERATOR/DSM PROGRAMS

IHCDA does not allow any weatherization grant funds to be used to cover all or part of the costs of refrigerator replacement.

309 REWORK POLICY

DOE issued guidance in WPN 11-03 concerning eligible call-back/add-on/rework policy. The concern was that DOE was being charged for additional work completed after a unit has been final inspected and reported to DOE. DOE will not permit the use of DOE funds to perform work (rework) after a unit has been final inspected and reported.

Per DOE WPN 11-03: “As a general rule, Grantees and sub-grantees may not charge the WAP for additional work on homes that have already been reported to DOE as completed, weatherized units. Once a home is reported to DOE as complete, the required final inspection indicates that all applicable work performed was done so in a workmanlike manner, including

all work that may have been contracted out such as furnace work, etc. Performing activities such as routine maintenance, repairs, or warranty-type work is not permitted using DOE funds for work beyond those costs already invoiced.”

For DOE funding, Indiana will perform real time monitoring to assist sub-grantees with compliance with the DOE guidance. Any units completed with DOE funding after January 10, 2011 and reported as a completion in IWAP will require special approval by IHCDa prior to any additional work being undertaken with DOE funds. Special approval will only be granted by IHCDa staff as a direct response to a real time monitoring finding and based specifically on the issues at hand. If a unit has special approval, the record will be unlocked to add rework invoices.

Other measures taken by IHCDa to comply with the WPN 11-3 guidance are:

- The IWAP system utilizes a “close out” requirement for a completion to count in IWAP and be reported to DOE. If this close out is not completed, IWAP will automatically lock records that are 45 days or older to prevent reworks being charged to the units.
 - If sub-grantees undertake measures which could fail shortly after repair or cleaning (i.e. bath fan, furnace blower, range hood, etc.), subsequent failures must be addressed by the sub-grantee either through a release of liability for those types of issues, or through non-DOE/Federal funding.
 - In accordance with DOE’s SWS 2.0702.1a, a minimum 1-year warranty for materials, workmanship, and serviceability will be provided to occupants upon completion of work.
 - Tied to the above referenced SWS requirement, IHCDa has been granted a variance.
- Appendix Y

310 LEAD-SAFE WORK PRACTICES

In response to DOE's actions in adopting the EPA's revised lead protocols, Indiana underwent a number of steps in order to adhere to the new EPA standards as outlined in the Renovation, Repair, and Painting Rule (RRP). Indiana is compliant with this rule and the steps taken to be compliant are outlined below:

- All sub-grantees have at least one Niton brand XRF 300 analyzer. Resourcing of the XRF is not an allowable cost with DOE funds. All resourcing expenses must be paid for with LIHEAP dollars. The cost of the resourcing exceeds \$5,000.00 resulting in this expense being treated as an Equipment budget line item. As such, written permission from IHCDa is required to purchase the resourcing.
- All sub-grantees **are** required to obtain and maintain Lead Firm status through the EPA.
- **All sub-grantee sub-contractors performing work in homes built prior to 1978 are required to obtain and maintain Lead Firm status through the EPA.**

- All sub-grantees will have at least one staff member who has achieved their Renovator certification. A certified renovator must be present as the work begins to ensure proper set-up of lead safe work practices and ensure everyone is properly trained. The certified renovator must also be present at the completion of the job to ensure that cleaning and clearance testing procedures are performed correctly. The certified renovator must be able to be contacted immediately by telephone or other mechanism while the work is on-going.
- Monitoring has included a LSW component which reviews practices, inventory, XRF use and reporting.

The purpose of the steps outlined above is to ensure full compliance with the EPA rule and to ultimately provide a better service to those clients who live in housing built prior to 1978 wherein the weatherization program will be disturbing more than the de minimus levels of painted surfaces containing either confirmed or assumed lead based paint. Additionally the steps outlined above are required to meet IHCD's Minor Paint Disturbance as outlined in item #3 on page 49 below.

Indiana has implemented a policy regarding lead based paint procedures on homes being weatherized. This policy includes providing clients with the pamphlet "Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools" and obtaining certification that they received the form. Sub-grantee staff working in homes are trained on how to work in a lead safe manner ensuring adherence to EPA, OSHA Rule 29 CFR 1926.26 as well as to HUD's Lead Paint Hazard Control, 24 CFR Part 35 . All sub-grantees performing weatherization services are encouraged to obtain Pollution Occurrence Insurance.

New employees are trained on lead safe work practices within the first six months of employment (commencing 45 days from hire date) to protect employees from the hazards of lead during weatherization work.

What must sub-grantees do?

Provide the Lead Paint form to all clients and landlords.

Either:

1. Use the XRF machine or EPA approved testing procedures to determine levels of lead in work areas as well as in individual components that might be disturbed when completing weatherization work or
2. Assume Lead Based Paint and follow Lead Safe Work Practices including clean-up and testing as outlined in the RRP rule for applicable housing.
3. Utilize IHCD's Minor Paint Disturbance Policy as outlined below:
 - All homes built prior to 1978, where paint will be disturbed and the paint is either verified or assumed to be lead based paint, the following lead safe work practices, at a minimum, shall be used:
 - Lay 6 mil plastic 10' beyond the area where lead based paint is disturbed

- (exterior)
- Lay 6 mil plastic 6' beyond the area where lead based paint is disturbed (interior)
- Wet the area of paint being disturbed
- Wet all paint chips prior to clean-up and removal
- Limit access to the area where paint is being disturbed
- Ensure that all appropriate personal protective equipment is used
- Ensure proper disposal of trash and material
- Provide pictures for the client file showing use of lead safe work practices
- Use the XRF to limit the need for lead safe work practices

The following instructions outline the use of the RRP Rule:

Sub-grantees will not be required to follow the RRP Rule for the following repairs:

- Renovation or repair to housing built in 1978 or later,
- Renovation or repair to zero-bedroom dwellings (studio apartments, dormitories, etc.),
- Renovation or repair to housing or components declared lead-free by a certified inspector or risk assessor, or
- Minor repair and maintenance activities that disturb 6 square feet or less of paint per room inside, or 20 square feet or less on the exterior of a home or building.
- Note: minor repair and maintenance activities do not include window or door replacement and projects involving demolition or prohibited practices.

All sub grantees must follow the following pre-renovations education requirements in all homes which do not meet the exemption criteria mentioned above.

In housing, you must distribute EPA's lead pamphlet to the owner and occupants before renovation starts.

- For work in common areas of multi-family housing or child-occupied facilities, you must distribute renovation notices to tenants or parents/guardians of the children attending the child-occupied facility. Or you must post informational signs about the renovation or repair job.

Informational signs must:

1. Be posted where they will be seen;
2. Describe the nature, locations, and dates of the renovation; and
3. Be accompanied by the lead pamphlet or by information on how parents and guardians can get a free copy (see page 31 for information on obtaining copies).

Sub-grantees must obtain confirmation of receipt (Appendix H - Client Consent Form) of the lead pamphlet from the owner, adult representative, or occupants (as applicable), or a certificate of mailing from the post office.

As of April 22, 2010 all sub grantees must comply with the following guidelines:

- Obtain and maintain Lead Firm status
- Have at least one Certified Renovator on staff.
- Perform lead safe work practices on every pre 1978 home where lead based paint is either confirmed or assumed to be present.

Firm Responsibilities:

Firms performing renovations must ensure that:

1. All individuals performing activities that disturb painted surfaces on behalf of the firm are either certified renovators or have been trained by a certified renovator;
2. A certified renovator is assigned to each renovation and performs all of the certified renovator responsibilities;
3. All renovations performed by the firm are performed in accordance with the work practice standards of the Lead-Based Paint Renovation, Repair, and Painting Program;
4. Pre-renovation education requirements of the Lead-Based Paint Renovation, Repair, and Painting Program are performed;
5. The program's recordkeeping requirements are met. The following records must be retained for three years following the completion of a renovation
 - Reports (if any) certifying that lead-based paint is not present.
 - Records relating to the distribution of the lead pamphlet.
 - Documentation of compliance with the requirements of the regulation (EPA has prepared a sample form that is available at: <http://www2.epa.gov/lead/sample-renovation-recordkeeping-checklist>).

Renovator Certification

To become a certified renovator an individual must successfully complete an eight-hour initial renovator training course offered by an accredited training provider (training providers are accredited by EPA, or by an authorized state or tribal program). The course completion certificate serves as proof of certification. Once accredited, trainers can begin to provide certification training.

Any sub-grantee staff or contractors who have successfully completed an accredited lead abatement worker or supervisor course, or individuals who have successfully completed an EPA, Department of Housing and Urban Development (HUD), or EPA/HUD model renovation training course, need only take a four-hour refresher renovator training course instead of the eight-hour initial renovator training course to become certified.

Renovators at either the sub-grantee or the sub-grantee's contractor must adhere to the following:

1. Must use a test kit acceptable to EPA or a XRF machine, when requested by the party contracting for renovation services, to determine whether components to be affected by

the renovation contain lead-based paint. Lead test kits recognized before September 1, 2010 must meet only the negative-response criterion outlined in 40 CFR 745.88(c)(1). The negative-response criterion states that for paint containing lead at or above the regulated level, 1.0 mg/cm² or 0.5% by weight, a demonstrated probability (with 95% confidence) of a negative response less than or equal to 5% of the time must be met. Please check our Web site at: <http://www2.epa.gov/lead/lead-test-kits>)

2. Must provide on-the-job training to workers on the work practices they will be using in performing their assigned tasks (this training must be documented)
3. Must be physically present at the work site when warning signs are posted, while the work-area containment is being established, and while the work-area cleaning is performed
4. Must regularly direct work being performed by other individuals to ensure that the work practices are being followed, including maintaining the integrity of the containment barriers and ensuring that dust or debris does not spread beyond the work area
5. Must be available, either on-site or by telephone, at all times renovations are being conducted.
6. Must perform project cleaning verification
7. Must have with them at the work site copies of their initial course completion certificate and their most recent refresher course completion certificate
8. Must prepare required records

Work Practice Requirements: General

1. Renovations must be performed by certified firms using certified renovators;
2. Firms must post signs clearly defining the work area and warning occupants and other persons not involved in renovation activities to remain outside of the work area. These signs should be in the language of the occupants;
3. Prior to the renovation, the firm must contain the work area so that no dust or debris leaves the work area while the renovation is being performed;
4. Work practices listed below are prohibited during a renovation:
 - a) Open-flame burning or torching of lead-based paint;
 - b) Use of machines that remove lead-based paint through high speed operation such as sanding, grinding, power planing, needle gun, abrasive blasting, or sandblasting, unless such machines are used with HEPA exhaust control; and
 - c) Operating a heat gun on lead-based paint at temperatures of 1100 degrees Fahrenheit or higher.
5. Waste from renovations:
 - a) Waste from renovation activities must be contained to prevent releases of dust and debris before the waste is removed from the work area for storage or disposal.
 - b) At the conclusion of each work day and at the conclusion of the renovation, waste that has been collected from renovation activities must be stored to prevent access to and the release of dust and debris.
 - c) Waste transported from renovation activities must be contained to prevent release of dust and debris.

Work Practice Requirements: Specific to Interior Renovations

1. Remove all objects from the work area or cover them with plastic sheeting with all seams and edges sealed.
2. Close and cover all ducts opening in the work area with taped-down plastic sheeting.
3. Close windows and doors in the work area. Doors must be covered with plastic sheeting.
4. Cover the floor surface with taped-down plastic sheeting in the work area a minimum of six feet beyond the perimeter of surfaces undergoing renovation or a sufficient distance to contain the dust, whichever is greater.
5. Use precautions to ensure that all personnel, tools, and other items, including the exteriors of containers of waste, are free of dust and debris when leaving the work area.
6. After the renovation has been completed, the firm must clean the work area until no dust, debris or residue remains. The firm must:
 - a) Collect all paint chips and debris, and seal it in a heavy-duty bag.
 - b) Remove and dispose of protective sheeting as waste.
 - c) Clean all objects and surfaces in the work area and within two feet of the work area in the following manner:
 - i) Clean walls starting at the ceiling and working down to the floor by either vacuuming with a HEPA vacuum or wiping with a damp cloth.
 - ii) Thoroughly vacuum all remaining surfaces and objects in the work area, including furniture and fixtures, with a HEPA vacuum.
 - iii) Wipe all remaining surfaces and objects in the work area, except for carpeted or upholstered surfaces, with a damp cloth. Mop uncarpeted floors thoroughly using a mopping method that keeps the wash water separate from the rinse water, or using a wet mopping system.
 - d) Cleaning verification is required to ensure the work area is adequately cleaned and ready for re-occupancy.

Work Practice Requirements: Specific to Exterior Renovations

1. Close all doors and windows within 20 feet of the renovation.
2. Ensure that doors within the work area that will be used while the job is being performed are covered with plastic sheeting in a manner that allows workers to pass through while confining dust and debris.
3. Cover the ground with plastic sheeting or other disposable impermeable material extending a minimum of 10 feet beyond the perimeter or a sufficient distance to collect falling paint debris, whichever is greater.
4. In situations such as where work areas are in close proximity to other buildings, windy conditions, etc., the renovation firm must take extra precautions in containing the work area, like vertical containment.
5. After the renovation has been completed, the firm must clean the work area until no dust, debris or residue remains. The firm must:
 - a) Collect all paint chips and debris, and seal it in a heavy-duty bag.

- b) Remove and dispose of protective sheeting as waste.
 - c) Waste transported from renovation activities must be contained to prevent release of dust and debris. A certified renovator must perform a visual inspection-is dust, debris, or residue present?
 - d) These conditions must be eliminated and another visual inspection must be performed.
6. Once the area has been adequately cleaned you're finished.

All Sub-grantees are also subject to the following recordkeeping requirements:

1. All documents must be retained for three years following the completion of a renovation.
2. Records that must be retained include:
 - a) A report certifying that lead-based paint is not present.
 - b) Records relating to the distribution of the lead pamphlet.
3. On April 23, 2010, to better prevent against lead paint poisoning, EPA issued a final rule to apply lead-safe work practices (Federal Register dated May 6, 2010) to most pre-1978 homes, effectively closing the exemption. ***The rule eliminating the opt-out provision became effective July 6, 2010.***
4. Documentation of compliance with the requirements of the Lead-Based Paint Renovation, Repair, and Painting Program (EPA has prepared a sample form that is available at <http://www2.epa.gov/lead/sample-renovation-recordkeeping-checklist>)

Monitors verify Renovator and Lead Firm status at the time of monitoring and track it to ensure each crew and contractor firm have sufficient renovators to ensure lead safe work practices are adhered to at all applicable job sites. IHCD requires all crews and contractors to take pictures documenting their use of lead safe work practices in order to be paid for the procedures. Pictures of lead safe work practice set-up must be included in the client file when: pre 1978 paint is being disturbed is either presumed to be lead based paint or has been tested and confirmed to be lead based paint.

Please reference the Indiana Weatherization Field Guide SWS-Aligned Edition, Health & Safety Section, for additional guidance and requirements for dealing with Lead Based Paint in Weatherization.

SECTION 400

BUDGETS AND CLAIMS

401 BUDGET FORMS

The Weatherization Assistance Program utilizes several different funding sources in the delivery of services. For each funding source, the Weatherization Program Manager must complete and return a separate budget form to IHCD prior to the beginning of each program year. Any sub-grantee that does not have approved budgets by the start of the program year will have all weatherization claims held by IHCD until receipt of the budget form. In general, the forms should be used to assist a Weatherization Program Manager in planning production and setting budget benchmarks for the grant period.

Requests for budget proposals will be emailed to each Weatherization Program Manager at the same time as the grant agreements are emailed to the Executive Directors for signature. Budget forms and definitions are in *Appendix C*. An original signature of the Executive Director or designee is required on all budget forms submitted with grant agreements and amendments. **Budget Modifications may be submitted via email for processing, a hard copy with original signature is not required.** Program Managers are required to review and sign each budget form.

Each sub-grantee will be responsible for limiting expenses to the amounts allowed for in the budget line items. In no instance will a sub-grantee be permitted to exceed the total award for a funding period.

402 BUDGET MODIFICATION FORMS

A Budget Modification form must be submitted by a sub-grantee when changes are necessary to budget line items. The Budget Modification form is the same form as the budget form *Appendix C*. Complete the box in the upper right hand corner accordingly. A budget form submitted with a grant agreement or amendment is **not** considered a modification. Updates will be made to the sub-grantee's budget in IHCDOnline.com for claims once all signatures are secured.

A Budget Modification form must be submitted to adjust line item allocations or production benchmarks.

403 PROGRAM INCOME

Program income is defined as any funds earned by sub-grantees from non-Federal sources during the course of performing Weatherization work. It is required that income earned from activities supported by a grant or sub-grant must be reported as program income. Sources of income to be reported include but are not limited to:

- Income from payments of principal and interest
- Income from fees or services provided (including rental of WX equipment and vehicles and staff wages and applicable charges)
- Income from the use of rental or real property acquired with grant funds
- Income from the sale of commodities or items fabricated under a grant agreement (i.e. vehicle).

Program income is to be treated as an addition to program funds. Program income funds must be used to enhance the sub-grantees Weatherization Assistance Program and be utilized within twelve months of when the program income was earned. When possible program income should be spent in the program year it was earned. If it is late in the program year, it can be used in the next program year (i.e. a sale at the end of September for LIHEAP funds)

Program income should be returned to the grant that the original purchase was made. Most purchases are made with LIHEAP funds. Those purchases made with ARRA funds and transferred to the DOE annual grant must be reported in the DOE grant. Program income must be tracked by the sub-grantees and must be reported on the close out form of the applicable program.

Property owner (i.e. landlord) contributions are NOT considered program income in the WAP Program.

DOE program income is subject to specific guidance provided in 10 CFR 600, Subpart B, 600.124 and Subpart C, Section 600.225 as appropriate. The amount of program income received will be detailed by the sub-grantee on the funding source Close-Out Form.

404 CLOSE-OUT REPORTS

Program Year End Close-Out Reports are due to IHCD within **forty-five** days of the end of the grant program year. Close-out Reports should accurately reflect the total dollars claimed for each line item after the final claim has been paid by IHCD. Sub-grantees are required to submit Close-Out Report that meets all program requirements to IHCD by the due date, **an original signature is no longer required**. Page #1 of the quarterly report must accompany the Close-Out Report and the Total Closed number must match the Total Completions from the Close-Out Report. IWAP and claims must be up-to-date as of the due date.

IHCD reconciles each sub-grantee's Close-Out Report with the IWAP production data (Quarterly Report & Job Expense report) and claims submitted during the grant year. This is done to verify that sub-grantees are in compliance with program guidelines. Sub-grantees must work closely with their financial department to accurately report expenses and claims. Outstanding weatherization claims will not be forwarded for payment until receipt of the report and the sub-grantee will not be eligible for the incentive pool allocation (DOE and LIHEAP funded programs as applicable). Emailed or faxed copies will not be sufficient for closeout reports and incentive pool consideration.

Sub-grantees are strongly encouraged to start work on the Close-Out Report several weeks prior to the actual due date. IHCD staff is available for guidance and will review completed Close-Out Reports for accuracy if the report is sent via email at least one week prior to the due date. IHCD wants to ensure all sub-grantees are able to submit an accurate and complete Close-Out Report by the due date and will offer recommendations, corrections and/or guidance to each sub-grantee who requests it prior to the due date. See *Appendix D*.

Effective Jan 1, 2015 all closeouts must be submitted with the following:

- Page 1 of Quarterly and last page of Job Expense report for a DOE Closeout
- Page 1 & 2 of Quarterly and last page of Job Expense for LIHEAP & State LIHEAP to cover Base/Mechanical/Capital Intensive

The number of completions on the job expense report, quarterly and closeout form must match for the closeout to be processed by IHCD.

405 CLAIMS

Sub-grantees shall submit properly completed claims and backup documentation to IHCD **at least monthly** for reimbursement of costs incurred during the prior month. **Claims submitted against Base, Mechanical or Capital Intensive must be supported by job costs entered in IWAP.** All claims and backup documentation (ie: timesheets & invoices) must be submitted online through https://ihcdaonline.com/AuthorityOnline/Training/Partners_Guide_to_IHCDOnline.pdf Please reference *Section 408*.

Sub-grantees may claim only incurred (accrued/obligated) material expenses. This is intended as “just in time” funding. Only material expenses that are expected to be due within ten days of the receipt of the claim may be submitted to IHCD. No subcontractor of a sub-grantee shall be paid for labor costs until such time as the sub-grantee has inspected the work and has determined that any such work has been performed in a satisfactory manner. Where subcontractors are utilized, the cost of materials shall be separated from the cost of installation in billings submitted by the subcontractor.

All final claims and close out reports must be submitted to IHCD within **forty-five** calendar days of the end of the program year or IHCD may deny payment. Sub-grantees must liquidate all outstanding obligations properly incurred during the term of the agreement no later than **forty-five** calendar days after the termination of the program year.

406 CLAIM SUBMISSION AND REVIEW

***NEW* Partner’s Guide to IHCDOnline**

Refer to the **IHCD Financial Operations Manual** for IHCD policies regarding the submission and processing of claims. Please reference the following link to access this information on IHCD’s website:

https://ihcdaonline.com/AuthorityOnline/Training/Partners_Guide_to_IHCDAOnline.pdf

Sub-grantees who have been placed on a Quality Improvement Plan (QIP) or a Tiered Funding Agreement should anticipate an increased level of claim review by IHCDAs' Community Program and/or Financial Operations Staff.

407 ORIGINAL SIGNATURES

The following is a guide explaining when a Weatherization form requires original signatures on the form:

Original Signature required to be submitted to IHCDAs:

- **Grant Agreement** – State of Indiana requires an original signature
- **Grant Amendment**
- **Grant Budget**

Original Signature only required on hard copy file at sub-grantee offices:

- **Grant Claims** – original signatures are not required for online claims. See Program Guidance WX-10-01A dated February 9, 2011 for details on paperless claims.
- **Equipment Purchase Request** – can be made via email.

DOE guidelines (10 CFR 600.242(d)), allows IHCDAs to accept a photocopy signature for claim forms. DOE regulations do not extend this option to IHCDAs so sub-grantees are required to retain the original, signed claim form along with back up documentation in a hard copy, paper file for the required retention period.

This DOE guidance to accept a photocopy signature only applies to claim forms. The State of Indiana requires grant agreements and all affiliated forms (amendments, original budgets,) to bear the original signature in hard copy form.

For all forms and agreements, the signature must be of one of the sub-grantee's "Authorized Signatures" as notarized and approved on IHCDAs Authorized Signature Form. If the person approved as the sub-grantee's authorized signature leaves or becomes ineligible to represent the organization, a new form must be submitted and approved before the person's signature can be accepted and the form is processed.

The required retention period is outlined in 10 CFR 600.242(a) and (b) requires that financial and programmatic records, supporting documents and statistical records must be retained for three years after the last expenditure report is submitted. If any litigation, claim, negotiation, audit or other action involving the records has been started before the expiration of the 3-year period, the records must be retained until completion of the action and resolution of all issues which arise from it, or until the end of the regular 3-year period, whichever is later.

408 IHCDAsonline CLAIMS SYSTEM

<https://ihcdaonline.com> is IHCDAs online claims system. All claims for weatherization funding sources (LIHEAP, DOE, Hoosier Energy Wood Stove Program, and State LIHEAP Funds) must be entered and submitted online.

Each sub-grantee must have at least one person authorized to use the online claims system. Additional staff may request access by clicking “*New User? Register Here*” at <https://ihcdaonline.com>. When approved, an email will be sent from IHCDAs. Contact IHCDAs if you forget your password or have problems with the system.

In 2012, IHCDAsonline broadened the types of claims for sub-grantees. Below are definitions of the new types of claims. If you are uncertain, email the Community Programs Analyst or Community Program Manager for advice before submitting the claim.

The following describes the allowable transaction types for the claim process.

Grantee Payment

A grantee payment is a standard draw of funds by the sub-grantee for their award. This transaction will initiate a payment to the sub-grantee through the claims process. This is the most common type of transaction.

Adjustment

An adjustment transaction allows a sub-grantee to make corrections to line items within an award. An adjustment will have both positive and negative line item amounts and must have a net total of zero. No funds are either drawn or paid as part of an adjustment transaction.

Return of Funds

A return of funds transaction is initiated when paid grant funds need to be returned due to a monitoring or financial audit issue. These funds will show on the claim summary but will not be returned to the sub-grantee’s claim budget. The state will reuse these funds in future allocations.

Repayment

A repayment transaction consists of a sub-grantee repaying claimed funds to the State. This transaction will initiate a repayment from the sub-grantee and the funds that are repaid will be available in the award budget and remaining balance. This transaction is necessary if completed homes have been claimed on a grant but then moved to another grant. All associated costs such as administration, insurance and audit allocations should be included along with the base program operations and health and safety costs.

409 MILEAGE, LODGING AND/OR SUBSISTENCE PER DIEM

Any claims requesting mileage, lodging and/or subsistence per diems will be reimbursed at the current rate paid by the State and in accordance with State Travel Policies and Procedures as specified in Financial Management Circular 2003-1 that can be found online at <http://www.in.gov/idoa/2459.htm>

A PDF of the policy manual can be downloaded from the website – see Policy – State Travel Policy. Rates change periodically for mileage and hotel as federal rates change. Check the State website for updated rates. Claims will be rejected if this policy is not followed.

410 ADMINISTRATION OF FUNDS

Funding shall be provided to sub-grantees as a reimbursement for authorized expenditures incurred for the Weatherization Assistance Program (WAP), in accordance with the fiscal policies and procedures of IHCD and the State of Indiana. Sub-grantees must maintain and implement written procedures to minimize the time elapsing between the transfer of funds to the sub-grantee and the sub-grantee's issuance of payment to subcontractors for program purposes. Sub-grantees will have a total of forty-five (45) days from the receipt of subcontractor invoice to check issuance for DOE and HHS funded grants.

Sub-grantee shall follow generally accepted accounting procedures and practices which sufficiently and properly reflect all costs incurred by sub-grantee. Sub-grantee shall manage all funds received through Weatherization funding sources in accordance with applicable cost principles identified in OMB Circulars A-87 (Government Entities) or A-122 (Nonprofit Organizations), now reported at 2 C.F.R. §§ 225, 230, respectively.

Sub-grantees shall maintain financial and accounting records which identify costs attributable to each Activity Description specified on Attachment A of each grant agreement. Sub-grantees shall further maintain annual, written, cost methodologies, which identify procedures for attributing costs to each Activity Description. More restrictive fiscal accountability may be required of sub-grantees by IHCD should IHCD determine that a sub-grantee is financially unstable, has a history of poor accountability, or has a management system which does not meet the standards required by the State of Indiana, IHCD, or the United States Government.

Sub-grantees shall maintain those books, records, and documents including, but not limited to: payroll records, banking records, accounting records, and purchase orders, which are sufficient to document sub-grantee's financial activities and sub-grantee's claims for reimbursement under this Agreement. Further, sub-grantee shall create, maintain, and provide to IHCD such other statistical and program reports as are required by the laws, regulations, and policies of the State of Indiana, IHCD, or the United States Government, including any close-out reports required by IHCD.

Sub-grantee shall, upon written demand by IHCD, be required to repay IHCD all sums paid by

IHCDA to Sub-grantee for which adequate fiscal and/or service delivery documentation is not in existence for any time period audited. If an audit or review of Sub-grantee results in an audit exception or cost disallowance, IHCDA shall have the right to set off such amount against current or future allowable claims, demand cash repayment, or withhold payment of current claims in a like amount pending resolution between the parties of any disputed amount.

IHCDA may withhold payment to Sub-grantee if a claim submitted by Sub-grantee is inaccurate or if Sub-grantee has not complied with the claim preparation instructions issued by IHCDA. IHCDA will notify Sub-grantee of any error in the claims submitted so Sub-grantee may make the corrections or revisions necessary for payment.

411 ADVANCE FUNDS

IHCDA is not currently issuing advance funds on any Weatherization grants.

412 DOE FINANCIAL MANAGEMENT TOOL KIT

DOE has provided a Financial Management Tool Kit and training to review all Weatherization financial management. The tool kit can be accessed online at <http://waptac.org/Training-Tools/Financial-Management-Tool-Kit.aspx>

SECTION 500

FUNDING

501 WEATHERIZATION PROGRAM MANAGEMENT

All weatherization work must follow Department of Energy rules and regulations unless exceptions are specifically stated in the policy manual, grant agreement and/or program guidance. Several exceptions are listed in this section 500. Any deviation from DOE guidelines, Indiana Policy and Procedures Manual or the Indiana Weatherization Field Guide SWS-Aligned Edition must have written approval from the Community Programs Manager prior to working on a unit. This approval only applies to the unit for which the request was made and must be printed and filed in the client hard copy file.

All Weatherization grants should follow OMB Cost Principles outlined in 2 CFR 230 (OMB Circular A-122 and/or the Uniform Guidance), Cost Principles for Non-Profit Organizations. Basic guidelines for costs:

- Costs are allowable if they are necessary and reasonable, not prohibited under state or local laws, conform to laws and regulations, give consistent treatment, comply with generally accepted accounting principles, and are not included as a cost under other Federal programs.
- Allocation of costs must be in proportion to the benefits received, cannot be shifted to overcome deficiencies in other programs, and must be supported by a cost allocation plan.
- Applicable credits are to be used to reduce expenditures applicable to a given grant (i.e. program income).
- The total cost of a grant program is comprised of allowable direct and allowable indirect costs less applicable credits.

502 ALLOCATIONS

502.1 Federal Allocation

DOE and LIHEAP allocations are distributed using the census-based allocation formula for 85% of Weatherization Sub-Grantees contracted funds. The remaining 15% of the allocation is distributed through an incentive pool process to those Weatherization Sub-Grantees who meet all of following criteria:

- A. 95% or more of the prior program year contract total must have been expended.
- B. Close Out Reports must be submitted and approved on time (within 45 days after the program year ends). IHCD DMS and sub-grantee Close Out report must match exactly when final claims are processed, with all line items and averages being within allowable

limits (production as shown in IWAP and expenditures as shown on the Close Out report and DMS are identical and within program limits).

- C. All applicable Competencies and Certifications (OSHA, Lead Renovator, etc.) for all Weatherization Sub-grantee and contractor staff are current and active throughout the previous contract year.
- D. A 15% average energy savings as determined by PRISM/BEACon analysis of local Sub-grantee production.
- E. No Weatherization Sub-Grantee operating under a 120-day or modified Quality Improvement Plan (QIP) will be included in the incentive pool.
- F. Weatherization Sub-grantees must demonstrate regular use of the XRF for lead based paint testing.
- G. Sub-grantee must meet the 45 day requirement for vendor and sub-contractor payments.

All the incentive pool requirements are in full effect for all current LIHEAP and DOE grants unless otherwise stated by IHCDCA.

IHCDCA may suspend the use of the incentive pool at their discretion based upon funding levels or other anomalies.

502.2 Reallocation of Funds

Sub-Grantees failing to meet self-imposed benchmarks as detailed on the most recently submitted budget form could be subject to funding allocation reduction or redistribution at IHCDCA's discretion.

Sub-grantees eligible for redistributed funds will be determined based on, but not limited to, the following criteria:

- Current level of expenditures for all active weatherization related programs
- Timely and accurate submission of claims
- Depth of existing waiting list
- Met self-imposed benchmarks
- Financial and program management capacity

IHCDCA will desktop monitor sub-grantee production, expenditure rates, and average cost per home throughout the life of each DOE or LIHEAP grant. This desktop monitoring will occur in accordance with the funding benchmarks as established by the sub-grantee on the appropriate DOE or LIHEAP budget form. In cooperation with meeting production and expenditure benchmarks, sub-grantees must maintain the appropriate average cost per home of each DOE and LIHEAP Weatherization grant. Failure of the sub-grantee to maintain funding benchmarks, production levels, expenditure rates and/or the appropriate average cost per home may result in IHCDCA reallocating funds. Any reallocation will be in an attempt to ensure proper utilization of Weatherization funds.

This desktop monitoring will consist of, at a minimum, a comparison of production as recorded in IWAP and the amount of grant funds claimed through IHCDOnline. This information will be used to track whether or not sub-grantees are maintaining the proper Average Cost per Home for both DOE and LIHEAP as referenced and required above.

Please reference the IHCD grant agreements in Section 3, Specific Terms, Letter O (for DOE) and Letter L (for LIHEAP) and Section 4, Administration of Funds (both DOE & LIHEAP) for additional information and guidance regarding the Average Cost per Home and administration of Weatherization grant funds.

502.3 Tiered Allocation

Sub-grantees who have failed to meet program expenditure benchmarks across multiple program years, are experiencing financial difficulty, or appear to have a lack of proper programmatic oversight may, at IHCD's discretion, be placed on a tiered funding agreement. While on a tiered funding agreement sub-grantees must expend funds according to a structured schedule. The performance benchmarks, or expenditure percentages, when possible, are based on the sub-grantee's performance in prior years. Failure to meet expenditure benchmarks will result in a reduction in funding with unspent funds to be redistributed to other eligible sub-grantees.

Tiered funding agreements will be included as part of the sub-grantee grant agreement where applicable.

Sub-grantees placed on a Tiered Allocation should anticipate an increased level of claim review by IHCD's Community Programs and Financial Operations staff.

502.4 Reduction of Funds

A sub-grantee may receive a reduction in funding if one of the following conditions is present.

- A sub-grantee voluntarily returns one or more counties within its service territory
- A sub-grantee returns substantial amounts of allocated funds over multiple years
- A sub-grantee fails to complete a QIP within two consecutive program years
- A sub-grantee fails to meet the expenditure benchmarks, as outlined in the grant agreements and budget forms, for multiple years.
- A sub-grantee is experiencing financial difficulties

502.5 Request for Qualifications and Request for Proposals

The state may post a request for qualifications (RFQ) to identify organizations with qualifications suitable to provide service delivery within a particular service territory. The RFQ is designed to increase the service capacity of that local area and provide additional service

opportunities to the program beneficiaries. A sub-grantee will be notified if an RFQ is posted for additional capacity provided within its service territory.

The goal is to find the most qualified service provider within a prescribed service territory. Therefore, it is important to note that RFQs are open to the general public as well as the community action network. Eligible applicants will be determined based upon the federal regulations for the program. IHCD will make a reasonable effort to assess if there is an adjacent, existing sub-grantee to support service delivery. Using an adjacent sub-grantee will be determined on a case by case basis.

Sub-grantees are encouraged to seek out assistance from their counterparts within Indiana's Weatherization Network who have the capacity to provide support or take on additional work. This step could result in avoiding the need for the RFQ or RFP process.

Following a request for qualifications (RFQ) a request for proposals (RFP) will be issued as IHCD deems necessary.

The RFP may also be posted for the following reasons:

- The primary sub-grantee has been on a QIP for more than two consecutive program years
- Failure to meet expenditure benchmarks for more than two consecutive program years
- Sub-grantee continues to demonstrate program deficiencies during monitoring visits for multiple program years
- The primary sub-grantee voluntarily forfeits one or more counties within its service territory
- IHCD has removed one or more counties from a sub-grantee due to performance issues
- If a sub-grantee is involuntarily removed from a particular area due to fraudulent or major misappropriation of funds, legal action has been taken against the sub-grantee, or the sub-grantee dissolves

Like RFQs, the goal of the RFP is to find the most qualified service provider within a prescribed service territory. Therefore, it is important to note that RFPs are open to the general public as well as the community action network. Eligible applicants will be determined based upon the federal regulations for the program. IHCD will make a reasonable effort to assess if there is an adjacent, existing sub-grantee to support service delivery. Using an adjacent sub-grantee will be determined on a case by case basis.

503 LIHEAP PROGRAM MANAGEMENT

503.1 Completion

NOTE: LIHEAP WX grant clients must adhere to the HHS requirement of 150% of the current OMB poverty income level to receive LIHEAP funded services.

Units may be counted as completions based on three sub-program categories within LIHEAP.

1. **Base Program** - completion occurs when at least \$100.00 in labor and materials have been used. **The maximum allowable average amount for the Base Program is \$7,000 effective October 1, 2015.**
2. **Mechanical Program** – completion is used in conjunction with DOE completions that require *extensive work on the mechanical systems* including the addition of mechanical ventilation to a dwelling. Under LIHEAP, work on the mechanical systems may be completed for health and safety and/or energy conservation reasons. **A Mechanical completion occurs when at least \$300.00 in material and labor has been** spent on the mechanical system. The DOE Base completion that **must** be paired with a Mechanical completion has to be finished by the end of the LIHEAP program year in order to count a dwelling under this sub-program. **The maximum allowable average amount for the Mechanical Program is \$4,500.00 effective October 1, 2015.**
3. **Capital Intensive Program** - completion that charges both the Base work and the Mechanical work to LIHEAP. A minimum of \$100 must be charged to Base measures and a minimum of \$300.00 must be expended on the mechanical system. Work on the mechanical systems may be completed for both health and safety and energy conservation. Capital Intensive costs cannot exceed the maximum average cost per home that is the total of Base Program and Mechanical Program. **The maximum average amount for the Capital Intensive Program is \$11,500.00 effective October 1, 2015.**

A unit may **not** be counted as **both** a DOE and a LIHEAP **Base** completion. **Nor can a unit be counted as both a DOE BASE and LIHEAP or State LIHEAP Capital Intensive completion.**

A unit may be counted as a completion under **only one LIHEAP sub-program**. A completion may **never** be counted as **both a Base and a Mechanical completion** within the LIHEAP program. If both Base and Mechanical sources of LIHEAP funds are used on a unit, this unit will count as one Capital Intensive LIHEAP completion.

For all units where LIHEAP funds are combined with DOE or other sources of funding, the entire weatherization process, including final inspection, must be completed prior to the end of the LIHEAP grant (September 30) –

503.2 LIHEAP Program Expenditure Limits

Budget Categories for LIHEAP include:

- **1 Administration** – *Actual costs associated with administration include fiscal, executive, support operations, rent, utilities, supplies, etc.* Total claimed may not exceed **6.753%** of the total LIHEAP expenditures.
- **2 Liability Insurance** – *Actual costs* attributable to the weatherization program, per sub-grantee cost allocation plan.
- **3 Supplies** – *Actual costs of weatherization specific supplies with a unit cost of less than \$5,000.00.* Examples include blower doors, draft gauges, and combustion analyzers.
- **4 Equipment** – *Actual costs for weatherization specific equipment with a unit cost greater than \$5,000.00,* such as vehicles, may be purchased with this line item. Equipment purchases require prior written approval from IHCD before purchase.
- **5 Base Program Operations** – *Actual costs for performance of necessary weatherization measures* as determined by the energy audit with a minimum of \$100.00 in labor and material. Work may include, but is not limited to, air sealing, insulation, and base load measures involved in weatherizing the house.
- **6 Mechanical Operations** – Actual costs in this item include, but are not limited to, testing and evaluation of combustion appliances, furnace repair or replacement, electric heating and hot water heaters including the addition of mechanical ventilation to a dwelling. The minimum mechanical cost for a unit to be counted as a Mechanical Operations completion is \$300.00.
- **7 Capital Intensive Operations** – *Actual costs that combine those associated with Base and Mechanical Operations.* A minimum of \$300 must be spent on mechanical repairs and at least \$100 in labor and material on the Base in order to claim under the capital intensive line item.

503.3 Allowable LIHEAP Expenses

IHCDA allows, as a LIHEAP program expense, the costs of eliminating energy related health and safety hazards prior to installation of weatherization materials. Health and safety is not a separate budget line item in LIHEAP and therefore is included in the average cost per home. DOE Health and safety items are considered as Mechanical expenses under LIHEAP.

Replacement of *gas cook stoves* will be allowed with LIHEAP funds as a health and safety measure and must be charged to the Mechanical line item. **Replacement of the cook stove may NOT be charged to DOE** but must be paid for with LIHEAP funds. *Repair* of the cooking stove may be charged to either DOE Health and Safety or LIHEAP Mechanical.

IHCDA does not allow DOE or LIHEAP funds to be used for replacing air conditioners. Repairs to an *air conditioning* system may only be made when current operation of the AC unit endangers the operation of the furnace. Repairs can be charged to either DOE Health and Safety or LIHEAP Mechanical.

Under no circumstances will a “buy down” of the cost of a measure be allowed in whole or in part. For the purpose of meeting the SIR requirement by using other resources to reduce the

investment in a material or measure, no federal resources or funds (including LIHEAP) may be used to offset the total installation cost. For more details see www.WAPTAC.org - WEATHERIZATION PROGRAM NOTICE 10-17.

IHCDA no longer allows LIHEAP or DOE funds to be used to cover any part of the cost for refrigerator replacements.

All questions concerning the available utility or refrigerator replacement programs should be directed to INCAA, 1-800-382-9895.

503.4 LIHEAP Re-weatherization

A “rework” is different and is defined in Section 309.

Prior to any weatherization activity, a unit must be evaluated to determine whether previous weatherization services have been provided. For homes utilizing LIHEAP funds, sub-grantees may provide weatherization services to a dwelling unit previously weatherized provided that it was at least **5 years** prior to the beginning of the current LIHEAP program year. (Example: Current LIHEAP grant year starts 10/1/15; 5 years prior to this date is 10/1/10 – the home would have to have received weatherization services through LIHEAP **prior** to 10/1/10 to be eligible for Weatherization services utilizing LIHEAP current year funds.

The following actions must be taken on each LIHEAP unit prior to weatherization services to ensure that homes that have received weatherization services within the last five years as outlined above:

1. Each client’s address must be entered into IWAP to identify whether the client’s home has been previously weatherized and determine what the date is
2. Each client must be asked whether their home has been weatherized previously and when the weatherization took place
3. A visual inspection of each home must be performed by an auditor to identify whether previous weatherization measures have been performed.

If there are no documented, verbal, visual, or physical evidence of previous weatherization services, the Sub-grantee may proceed with weatherization services on the unit.

If any of the above actions indicates or suspects that weatherization services have previously been rendered in a home, the Sub-grantee must check with the local agency that has historically provided weatherization services in the area to inquire about any records pertaining to services previously provided. Incumbent local agencies must cooperate with these inquiries from IHCDA or from new weatherization service providers. Failure of any Sub-grantee to comply with any such request could result in immediate suspension of payments under its DOE award agreement or termination of its award agreement by IHCDA.

504 DOE PROGRAM MANAGEMENT

All DOE completions are counted as Base Program completions. ***The maximum allowable average cost per home for DOE is \$7000.00 effective April 1, 2015.***

504.1 DOE Completion

In order for a home to be counted as a DOE completion and reported to DOE:

1. At least \$100.00 in labor and materials must have been used.
2. Weatherization work must be completed on the shell. This includes, but is not limited to air sealing, insulation of the walls, attic, perimeter, foundation, or floor.
3. A final inspection has been performed by a BPI certified Quality Control Inspector (QCI).
4. It has been certified that the work has been completed in a workmanlike manner and in accordance with approved procedures in 10 CFR 440.21 and 10 CFR 440.16(g), and;
5. All materials have been properly installed.

Agencies are required to complete appropriate base load measures on all homes completed in weatherization. Those measures include, but are not limited to:

- Faucet aerators;
- Low flow showerheads;
- Water heater blankets;
- Pipe insulation;
- Air sealing;
- Duct sealing where appropriate;
- Lighting upgrades.

DOE funds used to abate *health and safety* problems, as defined in Section 309, are to be tracked as a separate line item. These costs are not to be included in the average cost per home. IHCD limits expenditures in Health and Safety budget line to 20% of **Base Program Operations expenditures**. All health and safety measures must be charged within the allowable Health and Safety line item.

Furnaces may be replaced for energy efficiency under Base costs. However, agencies must use NEAT/MHEA to calculate the savings-to-investment ratio. A SIR of greater than one must be obtained to justify this expense under DOE Base. If NEAT/MHEA is used to justify the furnace replacement based upon energy efficiency, the NEAT/MHEA run must be used as the work order for the home.

All units where DOE funds are combined with LIHEAP or other sources of funding, the entire weatherization process, including final inspection, must be completed prior to March 31 – the end of the DOE grant/contract.

504.2 DOE Program Expenditure Limits

Budget categories for DOE include:

- **1 Administration – Actual costs**, associated with administration include *fiscal, executive, support operations, rent and utilities, supplies, copying, etc.* This applies to staff engaged in program administration.

Administrative cost will be up to 7% of the total grant expenditures for 2015-2016 DOE funding.

- **2 Liability Insurance – Actual costs**, insurance coverage is comprehensive general liability insurance coverage in the minimum amount of \$750,000.00 covering the risks related to the property and personal liability claims of other parties against the insured party. DOE strongly recommends Pollution Occurrence Insurance (also known as a Rider) (POI) as a part of, or as an addendum to, general liability insurance. POI will cover problems with Lead Safe Weatherization or disturbance of other environmental pollutants. This is an optional expense eligible to be charged to the Liability Insurance line item.
- **3 Fiscal Audits – Actual costs**, per sub-grantee cost allocation plan, attributable to the weatherization program for independent fiscal audit.
- **4 Base Program Operations** – The cost of weatherizing the house. Agencies may not exceed an **average cost per home of \$7000.00** in Base Program Operations. (See OMB Circular A-122 Attachment A and B for details.)
- **5 Health and Safety** – The cost for the evaluation, repairs, and/or replacement of water heating, furnace or vented space heating systems. This category represents an additional **20% of Base Program Operations amount expenditures** and is not included in the average cost per home. The primary goal of the program is energy efficiency. The cost of all energy-related health and safety risk mitigation must be charged to the DOE health and safety line, LIHEAP Mechanical or other outside funding sources. All costs must follow DOE WPN 11-6 issued January 12, 2011. See updated Section 300.

504.3 DOE REWEATHERIZATION

DOE: Prior to any weatherization activity, a unit must be evaluated to determine whether previous weatherization services have been provided. For homes utilizing DOE funds, if services have been provided **after September 30, 1994** the unit is not eligible for additional weatherization services utilizing DOE funds. Please reference WPN 13-1, section V.1.2. A “Reweatherized” unit falls into the category of time indicated above and described under 20 CFR 440.18(e)(2)(iii).

The following actions must be taken on each DOE unit prior to weatherization services to ensure that homes that have received weatherization services after September 30, 1994 are not re-weatherized:

1. Each client's address must be entered into IWAP to identify whether the client's home has been weatherized during or after 2000 (length of IWAP historical records);
2. Each client must be asked whether their home has been weatherized after September 30, 1994; and
3. A visual inspection of each home must be performed by an auditor to identify whether previous weatherization measures have been performed.

If there are no documented, verbal, visual, or physical evidence of previous weatherization services, the Sub-grantee may proceed with weatherization services on the unit.

If any of the above actions indicates or suspects that weatherization services have previously been rendered in a home, the Sub-grantee must check with the local agency that has historically provided weatherization services in the area to inquire about any records pertaining to services previously provided. Incumbent local agencies must cooperate with these inquiries from IHCD or from new weatherization service providers. Failure of any Sub-grantee to comply with any such request could result in immediate suspension of payments under its DOE award agreement or termination of its award agreement by IHCD.

504.4 Work Order Changes

Work order changes are defined as an item or items needing performed in order to complete a measure identified in the audit yet determined not to be performed on a regular basis. Sub-grantees shall require that charges for these work order changes are arrived at following proper procurement practices, invoices are itemized by labor and material costs and approval for the item or items is obtained by the sub-grantee prior to being performed.

505 HOOSIER ENERGY WOOD STOVE PROGRAM

The program supported by Hoosier Energy is available through November 2015. This program is offered to those sub-grantees serving EPA designated counties in southern Indiana. On June 1, 2013, all counties served by Hoosier Energy became eligible. Additional sub-grantees were allocated funds available and current sub-grantees received additional funds based on their qualifying counties. The program's priority is the replacement of wood stoves and boilers. On January 1, 2014, the program was expanded to include the replacement of electric resistance heat sources and inefficient heat pumps. Current guidelines are listed in sub-grantee grant agreements as *Appendix B*.

506 STATE-FUNDED INDIANA HOME ENERGY ASSISTANCE PROGRAM

Pursuant to **I.C. 4-12-1-14.5**, a limited amount of funds are allocated from the State of Indiana's portion of the mortgage foreclosure multistate settlement agreement to be used in the newly created Indiana Home Energy Assistance Program. Weatherization services must be conducted according to the LIHEAP guidelines described in Section 503, except as listed below.

The Indiana Home Assistance Program ("State LIHEAP Program") guidelines and procedures differ from the guidelines and procedures contained in Section 503 as follows:

1. All State LIHEAP weatherization funds must be used on **owner occupied units**;
2. Completions will be listed in IWAP under a new funding source: **State LIHEAP**;
3. Allowable Administrative costs are 5% of expended grant amount;
4. State LIHEAP cannot be combined with Federal LIHEAP Weatherization grant funds on the same unit;
5. State LIHEAP can be combined with DOE funding on the same unit following Federal LIHEAP guidelines; and
6. There are no Supply or Equipment budget line items.

Deferral issues can be addressed with State LIHEAP funds for homeowners only. Please refer to section 900 of this policy manual for guidance on addressing deferral issues.

507 UTILITY PROGRAMS

Weatherization sub-grantees are expected to utilize any and all utility program funds on every eligible weatherization job. Those Weatherization sub-grantees whose service territory is covered by a DSM (Demand Side Management) Program should charge eligible costs and measures to the utility funds first. This policy will maximize funds for service delivery throughout the state.

In 2015 IHCD entered into the 3rd year of the CLEAResult program Supported by Vectren. This rebate program will continue to offer funding for installed measures in designated zip codes. Funding provided through this program is distributed based upon the contractual agreement between IHCD and Vectren. Sub-grantees must ensure that CLEAResult funds are utilized to enhance their weatherization program. Suggested uses for CLEAResult funding are costs associated with training, dealing with deferral issues or weatherizing additional homes.

- Should CLEAResult funds be utilized to weatherize additional homes, normal DOE and/or LIHEAP regulations must be followed. In cases where extenuating circumstances exist and flexibility is deemed beneficial, sub-grantees may contact IHCD's Community Programs Manager to request guidance on how to best proceed.
- All CLEAResult funds must be tracked separately and will be monitored by IHCD to ensure all expenses are appropriate and verifiable.

INCAA currently manages two utility programs. These programs are the American Electric

Power Health & Safety Home Repair Program (AEP) and Vectren Share the Warmth. For questions about these programs, contact INCAA at 800-382-9895.

508 FUNDING SOURCE COMBINATIONS

The funding sources for weatherization and their sub-programs may be combined on any one weatherization job, in order to provide flexibility and to ensure that an individual dwelling can receive all appropriate measures as determined by the energy audit. The following are the allowable funding source combinations:

1. DOE Base + LIHEAP Mechanical
2. DOE Base + State LIHEAP Mechanical
3. DOE Base + LIHEAP Mechanical + DOE Health & Safety
4. State LIHEAP Base + DOE Health & Safety
5. LIHEAP Base + LIHEAP Mechanical creating a LIHEAP Capital Intensive
6. State LIHEAP Base + State LIHEAP Mechanical creating a State LIHEAP Capital Intensive
7. State Deferral funds can be combined with State LIHEAP, LIHEAP or DOE funding on the same unit.

Notes:

- Any one unit can only be counted as a completion in two funding sources.
- LIHEAP BASE and DOE BASE can NEVER be mixed.
- State LIHEAP BASE and LIHEAP BASE can NEVER be mixed.
- State LIHEAP BASE and DOE BASE can NEVER be mixed.
- State LIHEAP and LIHEAP can NEVER be mixed for a traditional Weatherization completion.
- DOE Base can NEVER be mixed with LIHEAP or State LIHEAP Capital Intensive.

Examples of how to combine various funding streams are given below.

- A home is weatherized under DOE Base Program. The Mechanical work, totaling \$600.00 is completed under the LIHEAP Mechanical Program. The Base work would be charged to DOE, including all related labor, as a Base completion. The Mechanical work, including labor, would be charged to LIHEAP Mechanical. This would be a completion under the DOE Base Program and also under the LIHEAP Mechanical Program.
- A home is weatherized however the mechanical costs are \$275.00. The Base work may be completed under either the DOE or LIHEAP Base Program. The costs for the mechanical work can be charged as DOE health and safety costs which are not included in the average cost per home for DOE. Since the cost for the mechanical work is less than \$300.00 it will not count as a LIHEAP Mechanical completion.
- The Base work was completed under LIHEAP and the home required \$2,000.00 in

mechanical work. The mechanical work could be charged to LIHEAP Mechanical resulting in a LIHEAP Capital Intensive completion.

- The same home in the previous example could be completed as a LIHEAP Capital Intensive unit and counted once as such. Or the Base work could be completed under DOE and the Mechanical work under LIHEAP Mechanical and counted as a completion under both programs.

SECTION 600

Training

601 IMPORTANCE OF TRAINING

Due to the technical and changing nature of the Weatherization Assistance Program (WAP), a high priority has been placed on the training aspect of the program. In Indiana, Weatherization specific training is offered by the Indiana Community Action Association (INCAA). Lead based paint risk assessor/inspector training is offered by the Environmental Management Institute (EMI). Classes of both organizations combine lecture and applied field demonstrations of the concepts discussed in the classroom in order to provide theory and application to weatherization staff and contractors.

Technical assistance which provides guidance on particular problems found in the field is a strong component of the WAP. Training and technical assistance in the field may be provided by either INCAA training staff or IHCDAs personnel depending on the issue and/or contractual commitments.

Agencies are strongly encouraged to take full advantage of the opportunities available to them for program enhancement and improvement through training and technical assistance. IHCDAs has taken a strong position that the Weatherization Assistance Program will maintain its level of technical expertise only through the continued emphasis on its Training and Technical Assistance component.

Training and monitoring are the tools that IHCDAs uses to ensure that weatherization measures are applied consistently and that Indiana maintains a high standard of work. Along with increasing flexibility in the combining of funds, IHCDAs has implemented training requirements to help ensure that monies provided are used on weatherization measures that will enhance energy savings. By including all staff and contractors in this process, it will ensure organizational performance while providing the means for evaluating our achievements, as well as developing plans to improve upon our successes.

602 MINIMUM TRAINING REQUIREMENTS

Working in conjunction with DOE's Weatherization Job Tasks Analyses IHCDAs, in cooperation

with INCAA, has developed Indiana Weatherization Competency Standards.

- The following three categories of workers exist in Indiana's Weatherization Competency Standards:
 - Energy Auditor
 - Retrofit Installers (Shell and Mechanical)
 - Crew Leaders (Required for Shell only)
- The following certification(s) are required by DOE with the training and certification process available at INCAA:
 - DOE Quality Control Inspector (QCI)
- The following certification(s) are offered at INCAA in addition to the requirements above:
 - DOE Energy Auditor
- Individuals performing energy audits in Indiana's Weatherization Assistance Program must either be Indiana Competent as an Energy Auditor or possess DOE/BPI's Energy Auditor Certification.
- **Indiana Weatherization Competency Standards:**
 1. **Those required to pass competency standards:**
 - All individuals working within the Indiana Weatherization Assistance Program in the categories of Energy Auditor, Retrofit Installer (Shell and Mechanical), Crew Leader and Quality Control Inspector are required to pass and maintain competency or certification in the category in which they work.
 - Sub-grantee staff and/or contractors who obtain an existing BPI Certification through INCAA as Building Analyst, Building Technician or Heating Technician will not be required to pass the competency testing for auditor or retrofit technician until their current BPI/INCAA certification expires. IHEDA strongly recommends all BPI/INCAA certified Building Analyst, Building Technicians, and Heating Technicians begin the process for becoming Indiana Weatherization Competent at least six months prior to the BPI/INCAA Certification expiration date.
 - As BPI/INCAA certifications expire, those individuals will be required to become Indiana Weatherization Competent in the category(s) in which they work. This being their initial competency they will be required to attend the appropriate training and pass both the written exam and skills verification testing.
 - Individuals who have expiring BPI/INCAA Heating Technician (HT)

Certifications may take a one day refresher course at INCAA and then proceed with taking the written exam and performing skills verification testing.

- Everyone working as a crew leader must train for and pass the Indiana Weatherization Competency for this category.
- Effective April 1, 2015, every completed dwelling in Indiana must be inspected by a BPI certified Quality Control Inspector (QCI).
- Effective April 1, 2015 Indiana's Final Inspector Competency is being replaced by the Quality Control Inspector (QCI). As of April 1, 2015 sub-grantees are no longer required to obtain or track this competency.
 - Individuals needing or desiring to perform final inspections in Indiana must obtain and maintain the QCI certification through the Building Performance Institute (BPI).
- All individuals desiring to become Indiana Weatherization Competent must be working with/for (staff and/or contractors) an IHEDA funded sub-grantee (with Weatherization funding) in order to train for and achieve being Indiana Weatherization Competent.
- In-take staff, fiscal staff, and clerical staff **are not** required to pass competency training.
- Workers who are performing limited, rarely utilized services such as specialty plumbers, exterminators, mold remediation, or specialty electricians **are not** required to pass competency training.
- Specialty contractors whose work results in changes to exhaust systems, ventilation systems or the tightening of the home **are required** to complete the Daily Safety Test Out (DSTO) training at INCAA and **are required** to complete a DSTO form upon completing their work on the home.
- IHEDA **does allow** the use of a Mechanical Helper. The Mechanical Helper is defined as an individual who only performs tasks such as helping remove old heating equipment and/or ductwork, assist with carrying tools and equipment to/from the home, and other work not related to testing, commissioning or adjusting heating systems. The Mechanical Helper is not allowed to be left at the home unsupervised, must be working with either a BPI/INCAA Heating Technician or Indiana Competent Retrofit Installer-Mechanical technician and is not allowed to perform any diagnostic testing, CAZ testing, or adjustments to/of heating systems. Sub-grantees are responsible for tracking the names and use of Mechanical Helpers. Sub-grantees must also ensure that the names of Mechanical Helpers are listed in the client file for each home worked in as

required in Section 607 below.

- It is the sub-grantees and the certified/competent technician's responsibility to ensure that the Mechanical Helper is properly supervised and utilized.
- The Mechanical Helper must have a background check performed prior to working in a client's home as outlined in section 610.

603 TRAINING REQUIREMENTS

- Testing will be performed at the end of each class offered through INCAA. This testing is required as part of INCAA being a nationally accredited training center and follow DOE's National Training/Certification Program. Test results will be tracked by INCAA and will be available to IHCD, the sub-grantee Weatherization Program Manager and the sub-grantee Executive Director upon request.
 - Sub-grantee Executive Directors and Weatherization Program Managers may only request and view testing results for their employees or sub-contractors.
- **Time Limits for becoming Indiana Weatherization Competent**
 - All sub-grantee staff/contractor new employees will have six months commencing 45 days from their date of hire to become Indiana Weatherization Competent in the category(s) they are working in.
 - Sub-grantees are allowed to enroll new staff/contractor employees in training prior to the expiration of the 45 days if they choose to do so. This decision should be based upon the expectation that the new staff/contractor employee will be retained in their new position.
 - Sub-grantees may shorten the 45 day grace period to 30 days provided this shortened time period is approved by IHCD and included in the sub-grantee's policy and human resources manuals.
 - All sub-grantee staff/contractor employees must have a completed background check prior to being allowed to work in/on client homes. IHCD's specific requirements for background checks are detailed in Section 610 below.
 - **Individuals not identified as working with an IHCD funded sub-grantee providing Weatherization services will not be allowed to participate in**

training or testing toward becoming Indiana Weatherization Competent.

- Exceptions to this requirement will only be allowed on a case by case basis. Should an exception be desired or felt necessary, permission from IHCDCA must be granted prior to attending training and pursuing competency verification.

- **Testing Parameters**

- Becoming Indiana Weatherization Competent will require passing both a written exam and a skills verification event. The skills verification event will involve performing skill sets associated with the competency category being tested.
 - Both the written test and the skills verification event are pass/fail. There will be no provisional results given.
 - Should re-testing of the skills verification be necessary only the portion failed by the candidate will need re-tested.
 - Should re-testing of the written test be necessary the entire written test must be completed. Certain categories of competency utilize more than one test. For these competencies candidates will be given a different test on their second attempt.
 - All testing results will be sent to the candidate, the sub-grantee Weatherization Program Manager and the sub-grantee Executive Director.
- Candidates will only have two opportunities to pass all testing to become Indiana Weatherization Competent. Failure to pass competency on the second attempt will result in that individual no longer being allowed to work in Indiana's Weatherization Assistance Program.
 - If the individual testing for one competency holds another competency yet fails the second attempt for the additional competency, the individual would be able to continue working in the competency that has been achieved. For example, an individual has become Indiana Weatherization Competent as a Retrofit Installer Shell. This same individual tests to become a Crew Leader but fails both attempts. This individual would be allowed to work in Indiana's Weatherization Assistance Program

as a Retrofit Installer Shell but not perform the duties of a Crew Leader.

- Should a second attempt at passing competence be needed, the second attempt shall take place no later than three months following the initial attempt.
- IHEDA will only pay for the first attempt for an individual to pass competency. In the case of a failed attempt, the sub-grantee or contractor will be responsible for the cost of the second test procedure.
- Competency testing must take place no later than the conclusion of the six month training period commencing 45 days from their hire date.
- **Quality Control Inspector (QCI) through BPI**
 - Candidates needing to become QCI Certified must complete the following steps:
 - Apply for a letter of permission from BPI to sit for testing
 - Pass both written and skills verification testing according to BPI and DOE requirements
 - Testing Perimeters
 - The QCI written test is performed on a lap top computer at INCAA and requires the letter of permission from BPI
 - Candidates have six opportunities within a twelve month time period, commencing at the date of the first test, to be successful at the written test. Should the candidate fail the written test six times they are ineligible to test again until the twelve month time period has elapsed.
 - IHEDA will only cover the expense for the first test. Should additional attempts at testing be necessary the cost of testing will be the responsibility of the contractor, the sub-grantee or the individual taking the test.
- **Class Recommendations**
 - Individuals new to Weatherization attempting to obtain the Retrofit Installer Shell Competency are strongly encouraged to complete Daily Safety Test-Out (DSTO) training prior to performing skills verification testing.
 - Individuals attempting to obtain the Energy Auditor Competency or DOE's Energy Auditor Certification are strongly encouraged to complete Mechanical Systems for Auditors prior to performing skills verification testing.

604 DURATION, MAINTENANCE, AND RECORDKEEPING

- Each Indiana competency will be in effect for three years
 - At the end of the three year duration each competent individual must re-test and pass the skills verification portion of their competency (s).
 - Each candidate will have two opportunities to pass the skills verification portion of their competency (s).
 - IHCDCA will only pay for the first attempt for an individual to pass competency. In the case of a failed attempt, the sub-grantee or contractor will be responsible for the cost of the second testing event.
 - At the end of three years, individuals holding competencies as both Retrofit Installer Shell and Crew Leader will only need to test for and pass the Crew Leader competency. Passing the Crew Leader skills portion will initiate the next three year cycle for both the Retrofit Installer Shell and Crew Leader competencies. From the point forward, both competencies will have the same expiration dates.
 - The BPI Quality Control Inspector certification is also in effect for three years. All BPI requirements regarding the QCI certification must be followed to maintain this certification.
- All Indiana Weatherization Competent, QCI and BPI certified individuals are required to attend an Annual Competency Maintenance Training in years two and three of their competency(s) or BPI Certification.

604.1 CONTINUING EDUCATION UNITS (CEUs)

- **The requirement of Continuing Education Units is designed to ensure that Indiana's Competent and Certified individuals increase their knowledge base beyond what is necessary to obtain the competency. This is one way that IHCDCA is helping to ensure that each client's home receives the highest quality of Weatherization services possible.**
- All Indiana Weatherization Competent individuals must acquire 16 CEUs per year (April 1 – March 31).
 - Record of CEUs must be tracked by the sub-grantee for their Weatherization staff, crews, and contractors.
 - The 16 CEUs requirement is per individual and not per competency. For example, an individual holds competencies for both Retrofit Installer

- Shell and Crew Leader. This individual is only required to obtain 16 CEUs.
- Sub-grantees must track the training that was taken connected to the claimed CEUs for review at time of monitoring. This tracking must include documentation verifying completion of the training, who performed the training and the length of time that the training lasted.
 - **Non-technical training for CEUs is limited to four (4) hours.**
 - The requirement for CEUs begins at the time that an Indiana Competency or BPI Certification is obtained. The following scale represents a reduced CEU requirement based upon when the first or initial competency is obtained:
 - Competency obtained on or after July 1: 12 CEUs required
 - Competency obtained on or after October 1: 8 CEUs required
 - Competency obtained on or after January 1: 4 CEUs required
 - For the QCI certification, BPI requires that individuals holding this certification obtain 10 CEUs each year the certification is in effect for a total of 30 CEUs for the life of the certification. Provided that the QCI obtains 10 CEUs per year that the certification is in effect, they will only be required to pass the skills portion of the QCI testing to recertify.
 - **The following is a list of examples of training that apply toward the 16 hours of continuing education:**
 - National DOE Conference
 - Affordable Comfort Conference
 - Annual Competency Maintenance Training – (Pre-set at 4 CEUs)
 - Semi-Annual Technical Training (SATT) – (Pre-set at 4 CEUs)
 - Semi-Annual Managers Meeting(SAMM)
 - For those involved in Program Management
 - Indiana Healthy Homes Conference (Lead Base Paint, Mold, etc.)
 - Lead Based Paint **refresher courses** including Risk Assessor, Inspector, Supervisor and Renovator
 - INCAA General Weatherization Training
 - **INCAA courses are rated hour for hour regarding CEUs. For example, a class that lasts for six hours will result in accumulating six hours of CEUs.**
 - Examples include DSTO Class, CAZ Classes, High Performance Insulation, etc.
 - On-Site Technical and Training Assistance Trainings performed by

INCAA

- Sign-in sheet is required for CEUs to count
 - Sign-in sheet must record how long the training lasted
 - CEUs will accumulate hour for hour as described above. If the training lasts six hours then six CEUs are accumulated.
- **The following is a list of examples of training that DO NOT apply toward CEUs:**
- The required training to obtain a particular competency DOES NOT count toward CEUs. For example – someone is taking the four-day Energy Auditor training to obtain their Energy Auditor Competency. This four day class DOES NOT count as CEU's – it is required to obtain the competency.
 - Say the above person takes a CAZ class to supplement the Energy Auditing training. The CAZ class DOES count toward their CEUs.
 - Classes outside of INCAA that do not pertain to Weatherization skills and topics
 - Classes that are taken for which the sub-grantee has no documentation of class completion or attendance
 - Classes that are not related to the competency or certification that the individual(s) obtain
 - Please note that these are not exhaustive lists. Questions regarding whether or not a particular training would/should apply toward the 16 hours of continuing education should be directed to IHCD's Community Programs Manager prior to attending the training.
 - Questions regarding industry specific training being allowed to count toward the 16 hours of training should be directed to IHCD's Community Programs Manager.
 - **IHCD STRONGLY recommends that the required CEUs be obtained through training offered through the accredited Weatherization courses offered at INCAA.**
- Each IHCD sub-grantee is responsible for accurately tracking all staff and/or contractor competencies and certifications.
- This tracking must include the following information:

- Individual name and competency(s) and/or BPI certifications held
- Date competencies and/or BPI certifications expire
- Hire date
- Attendance at Annual Competency Maintenance Training
- Current BPI/INCAA Certifications where applicable
- Record of training for 16 hours of CEUs
- IHCD will verify training records and qualifications of all sub-grantee staff, crew members and contractors annually near the end of March. Sub-grantees must be prepared to provide training documentation whenever it is requested by IHCD. Training records must contain clear documentation and verification that the required and appropriate training was attended and completed. Examples of this documentation include copies of training certificates, sign-in sheets (conferences for example), and BPI student portal information.

605 ADDITIONAL COMPETENCY/TRAINING REQUIREMENTS

- IHCD staff and contracted monitors responsible for evaluation of sub-grantee administrative performance are required to complete at least eight (8) hours of administrative training per year.
- IHCD staff and contracted monitors responsible for evaluation of sub-grantee technical performance are required to complete at least ten (10) hours of technical training per year.
 - IHCD staff and contracted monitors responsible for evaluation of sub-grantee technical performance are required to be either Indiana Weatherization Competent as an Energy Auditor or BPI certified as an Energy Auditor and be certified as a BPI Quality Control Inspector.
- Weatherization Program Managers responsible for the administration of the Weatherization Assistance Program at the sub-grantee level are required to attend all Semi-Annual Managers Meetings (SMM) as well as any other required administrative offerings provided by IHCD. If a Weatherization Program Manager is not able to attend any required training, an appropriate representative from the sub-grantee must attend in their place. SMM's will be held no more often than twice per year and other administrative courses will be held as deemed necessary by IHCD. When possible, IHCD will attempt to host trainings via webinar, video conferencing, distance learning, or conference calls.

- Each sub-grantee is required to send at least one technical representative for their field staff/contractors to all Semi-Annual Technical Trainings (SATT). All field staff and contractors are encouraged to attend when not otherwise restricted by IHCD. SATT's will be held no more often than twice per year unless additional training is deemed necessary by IHCD.
- All staff or contractors subject to the competency training outlined earlier in this chapter are required to attend Lead Safe Work Practices and Mold & Moisture Assessment within the first six months of employment.

606 ADDITIONAL TRAINING OPPORTUNITIES

- IHCD will continue to offer, through INCAA, additional courses which will address specialized training needs in one to five-day class formats. Course subjects, course descriptions, length of classes, prerequisites, and course schedules are located on INCAA's web site at incap.org under the Weatherization Training link.
- Classes are filled on a first come-first served basis. Once a class is filled, sub-grantees are encouraged to place those needing training on the waiting list so that existing classes can remain full if there are cancellations and future classes can be scheduled to meet the demand. To be placed on the waiting list individuals must register for the class.

607 COMPLIANCE ISSUES

- IHCD will evaluate compliance with competency and other required training **annually near the end of March. Sub-grantees must be prepared to provide IHCD with training documentation whenever it is requested by IHCD..**
- If a sub-grantee fails to meet the Indiana Competency Training or DOE Quality Control Inspector (QCI) requirements or is found to have an individual or individuals working or worked on a weatherization home without the above mentioned requirements IHCD may take, but not be limited to, the following steps:
 - Issue a written finding with a timeline for resolution of the non-compliance issues
 - Require re-works or re-inspections at the sub-grantee/contractor expense
 - Require repayment of all funds claimed for the affected

Weatherization work

- Hold the sub-grantees weatherization financial claims until all issues are properly addressed
- Temporarily suspend the affected workers from performing work in Indiana's Weatherization Assistance Program
- IHCD will review sub-grantee compliance through sub-grantee files (tracking) and INCAA training records. It is the responsibility of the sub-grantee to identify within the client file each individual(s) who completed the initial audit, shell and mechanical work (including everyone performing work), pressure diagnostics of the home, who evaluated the combustion appliances and performed the interim inspection (when necessary) and the Quality Control Inspection (QCI).

608 LEAD BASED PAINT

- Every sub-grantee is required to be in compliance with the Environmental Protection Agency's (EPA) Lead Renovation, Repair, and Painting Rule (RRP). All contractors performing work where deminimis levels of assumed and/or confirmed lead based paint will be disturbed must be an EPA Firm and comply with the EPA RRP Rule. Details regarding compliance and requirements can be found at the EPA's RRP site <http://www.epa.gov/lead/pubs/renovation.htm>
- All HUD properties receiving Weatherization services must follow HUD lead based paint rules.
- IHCD Minor Paint Disturbance Policy:
 - All homes built prior to 1978, where paint will be disturbed and the paint is either verified or assumed to be lead based paint, the following lead safe work practices, at a minimum, shall be used:
 - Lay 6 mil plastic 10' beyond the area where paint is disturbed – exterior
 - Lay 6 mil plastic 6' beyond the area where paint is disturbed – interior
 - Wet the area of paint being disturbed
 - Wet all paint chips prior to clean up and removal
 - Limit access to the area where paint is being disturbed
 - Ensure that all proper personal protective equipment is used
 - Ensure proper disposal of trash and material
 - Provide pictures for the client file showing use of lead safe

work practices

- Use the XRF to limit the need for lead safe work practices
- IHCD requires that each sub-grantee maintain the following:
 - Obtain and maintain Lead Firm Status through the EPA
 - Have at least one Weatherization staff member who has achieved Renovator certification
 - Have at least one Weatherization staff member who is a licensed Lead Risk Assessor and capable of performing lead test with the Niton XRF Analyzer

609 OSHA TRAINING

- IHCD requires OSHA 10 hour and OSHA 30 hour training for the following individuals:
 - **OSHA 10 hour training:** Required for all Weatherization workers who work in the home. This includes auditors, final inspectors, shell workers, and mechanical workers. For newly hired employees this training must be completed within the first six months of employment commencing 45 days from hire date.
 - **OSHA 30 hour training:** Required for all crew supervisors and HVAC employees working alone. Crew supervisors are those individuals who serve in the capacity of an onsite supervisor monitoring and directing onsite work and safety practices. For newly hired crew supervisors and HVAC employees working alone this training must be completed within the first six months of employment commencing 45 days from hire date.

610 BACKGROUND CHECKS

- In order to protect the safety of clients receiving weatherization services, sub-grantees must perform a criminal background check and employment verification prior to the employment of sub-grantee/contractor employees planning to work with clients or in the home of client's being rehabilitated or weatherized as a part of Indiana's Weatherization Assistance Program.

The criminal background report must contain a criminal background check which includes the following:

- State and county records from all 50 states including data from courts, sexual offender registries and department of correction records
- An Indiana criminal history check which contains records of criminal

convictions or currently pending criminal charges in counties throughout the State of Indiana

- A Social Security Number (SSN) Trace which provides names and addresses associated with a social security number along with the date and state of its issuance (this is a tool to aid in verifying the identity and location of a particular applicant)
- Confirmation of employment dates and job titles held with previous employers, the reason for leaving, and eligibility for rehire, if available.
- Sub-grantees must use careful consideration when analyzing the results of the reports and prohibit employment of anyone convicted of violent offenses (including but not limited to aggravated battery, physical assault, use of weapons, home invasion, rape, murder, burglary, robbery) or appearing in any sex offender registry.
- Sub-grantee Weatherization Program Managers are encouraged to work with their Human Resources and Executive Staff personnel to develop acceptable hiring practices based upon background check results.
- It is the sub-grantee's responsibility to ensure that this background check is performed and properly tracked for all sub-grantee weatherization staff and contractor employees.

611 DOE NATIONAL CERTIFICATIONS

- **Effective April 1, 2015, every weatherized home in Indiana must be final inspected by a BPI certified Quality Control Inspector (QCI) to count as a completion.** Each sub-grantee must have the capability to meet and maintain this requirement by April 1, 2015.
- The QCI Certification will be effective for three (3) years. The Building Performance Institute (BPI) is the certifying body for the QCI Certification. BPI requires that each QCI Certified individual obtain 10 CEUs per year of the duration of the certification. IHCD will allow the 10 CEUs obtained for this certification to count toward the 16 CEUs outlined in Section 604.1 above. QCI certified individuals are encouraged to reference BPI's web site regarding acceptable CEUs for the QCI certification.
- IHCD will continue testing for DOE's National Energy Auditor Certification and Quality Control Inspector during the DOE funding cycle of April 1, 2015 – March 31, 2016.

SECTION 700

MONITORING

701 QUALITY ASSURANCE

The primary purpose of monitoring visits is to assist the Weatherization Sub-grantee in providing high quality energy conservation services to low-income people. Monitoring also provides compliance review and information sharing to Weatherization Sub-grantees to ensure that:

- High quality, comprehensive weatherization services are provided consistently throughout the state.
- Healthy, safe, and energy efficient housing improvements are provided to low-income households.
- Program accountability and efficiencies are in effect and verifiable
- Federal, State and IHEDA standards and regulations are followed

702 STANDARDS AND PRACTICES

Program Monitoring: IHEDA will perform real-time Program Monitoring for each Weatherization Sub-grantee at least once a year. The program monitoring includes a review of Program Administration, Procurement, Training, Competency & Certification, Database Input, Fiscal Information, Client File Review and Field Inspections. At least 10% of completed DOE client files will be reviewed. Each area of the Program Review is explained in more detail below.

- **Program Administration** – IHEDA will review agency policies as they apply to awarding priority, wait list maintenance, rental policies, and client redetermination.
- **Procurement** – This section covers materials procurement and selection; contractor selection, procurement, and evaluation; price lists and written procurement standards. Please reference Section 800, sub-section 807.1 of this manual for additional information.
- **Training, Competency & Certification** - IHEDA monitors will review whether the Weatherization Program Manager is using appropriately trained/competent staff to perform various job functions. The use of subcontractors will be reviewed to determine compliance with job function training requirements as outlined in *Section 600* of this manual. Monitors will also review contractors for compliance with local licensing standards. Sub-grantee lead based paint practices and compliance with EPA and HUD regulations will also be reviewed.
- **Database Input** – A selection of the client files are checked to ensure information from the client files is getting entered into the IWAP database accurately and completely.
- **Fiscal** – Effective April 1, 2015 each IHEDA Weatherization Sub-grantee will receive financial monitoring via use of a professional services contractor. The contractor will be checking for appropriate payment processing as specified in *Section 500* of this manual. The contracted monitor will also be looking at grant utilization to make sure funding is

utilized in allowable combinations, that sub-grantees have properly tracked and utilized Program Income, that contractors are paid within the allowable payment period, and that the back-up documentation provided with claims is appropriate to the claim made.

- **Client File Review** – Files will be pulled at random from completions entered into the IWAP database. These files will be checked for correct forms, accurate information, appropriate work processes, and eligibility verification. Monitors will also request a sampling of deferred files to review for appropriate documentation and appropriate deferral. A minimum of 10% of all completed DOE client files will be reviewed.
- **Field Inspections** (See Technical Monitoring below) – IHCD staff will conduct on-site inspections of a sample of dwellings pulled from the file review or at random from the IWAP database. The purpose of this monitoring is to ensure that weatherization services are provided in a professional manner in compliance with all standards, regulations and policies set forth by DOE, HHS and IHCD. The local sub-grantee is responsible for quality control on all completed units and must ensure that the final inspection completed by the BPI certified Quality Control Inspector (QCI) attests to the level of quality, professionalism, and appropriateness of all measures performed. The field inspection will cover the appropriateness of Base Load, Shell, and Health and Safety measures. During the field inspection, IHCD staff will be checking for all invoiced materials, justification for the number of labor hours charged, initial and final audit detail, adherence to technical standards, and accuracy of sub-grantee diagnostic testing.
- A copy of the Program Monitoring Tool utilized by IHCD's monitoring staff can be found at the end of this manual as *Appendix F*.
- **Training and Technical Assistance (T&TA)** – The purpose of T&TA is to provide sub-grantees with assistance in the technical aspects of the weatherization program. IHCD monitoring staff is available for consultation via the phone or email on a daily basis. If sub-grantee personnel feel it necessary, and time allows, IHCD monitoring personnel may be available for T&TA visits to the sub-grantee.
- **Quality Improvement Plan** – Program Monitoring visits uncovering serious, numerous or recurring findings may result in the sub-grantee being placed on a 120-day Quality Improvement Plan [QIP]. The intent of the QIP is to help the sub-grantee improve the areas of deficiency. As part of the QIP, IHCD monitors will make additional visits to the sub-grantee during the 120-day period to ensure changes are being implemented and all noted findings are being resolved. The QIP may be extended or modified as deemed necessary by IHCD to accomplish the needed sub-grantee improvement. IHCD also reserves the right to issue a modified QIP, which could encompass fewer visits or a modified timetable.
 - **A sub-grantee may be placed on a QIP if one or more of the following program deficiencies are identified:**
 - **General Administrative Deficiencies that include late interim or closeout reports, late completion reporting (data entry), lack of procurement policies, outdated cost allocation plans**
 - **Fiscal Reporting issues that include failure to claim expenses on a monthly basis, repeated occurrences where expenses are submitted more than 45**

- days after the invoice or purchase order date, contractors paid beyond the 45 day requirement
 - Staff or contractors fail to receive proper certifications.
 - Average cost per home exceeds cost guidelines set forth by DOE or HHS funding
 - At least 25 percent of client files reviewed are deemed ineligible
- Sub-grantees who have been placed on a QIP will receive a higher level of scrutiny and monitoring from IHCD staff. Sub-grantees can expect for IHCD staff to:
 - Review completion reporting on a more frequent basis,
 - Perform DOE and LIHEAP fiscal analysis to ensure that the amount of funds claimed falls in line with the average cost per home based on completions entered into IWAP
 - Additional monitoring of claims submitted for payment
 - Training and technical assistance for program and administrative staff that will be customized to mitigate performance deficiencies. Additional onsite visits, as needed, to monitor the agency's progress in correcting the performance deficiencies

Technical Monitoring: IHCD will perform real-time Technical Monitoring for each Weatherization Sub-grantee at least once a year. Technical Monitoring will evaluate the appropriateness of Base Load, Shell and Health & Safety measures. The Technical Monitoring will also review and inspect for all invoiced materials, justification for the number of labor hours charged, initial and final audit detail, adherence to technical standards and accuracy of sub-grantee diagnostic testing. Additionally the Technical Monitoring will cover the quality, professionalism and appropriateness of all measures performed or installed. A minimum of 5% of all DOE completed homes will be monitored.

- Sub-grantee responses to technical findings MUST include documentation verifying that all findings have been corrected.
- IHCD's monitoring staff will, when possible, incorporate in-progress visits to client homes as part of the Technical Monitoring visit.
- Effective May 16, 2015 IHCD's Community Programs Monitor will incorporate Indiana's standardized Final Inspection Form into each technical monitoring visit.
- Effective April 1, 2015 IHCD's Technical Monitoring visits will include an evaluation of the Quality Control Inspector (QCI) process to ensure that the inspection process is fulfilling the expectations of WPN 15-4.
- Sub grantees are required to ensure that each Weatherization completion receives an appropriate and properly executed final inspection. This inspection must be performed by a DOE/BPI certified Quality Control Inspector (QCI). IHCD, as part of their regular monitoring procedures, will review final inspection forms, sub-grantee inspection processes and completed homes to ensure the inspections are being performed correctly and in a manner that meets DOE expectations as outlined in WPN 15-4. Failure by the sub-grantee to utilize the QCI process correctly may result

in the affected completion(s) being considered unallowable and all associated cost being returned to IHCD. Should multiple instances of poorly performed inspections be found, IHCD will, at the very minimum, place the sub-grantee on a Quality Improvement Plan (QIP). Should the QIP fail to correct the issues, IHCD will seek stiffer actions as allowed in the Weatherization Policy and Procedures Manual and the sub-grantee grant agreement (contract).

- If a client is a “no show” for a scheduled Technical Monitoring visit, an in-progress visit shall be performed during the time of the original appointment. It is the sub-grantees responsibility to know the locations where their contractors or crews are working to facilitate the in-progress visit under these circumstances.
- **Quality Improvement Plan** – Technical Monitoring visits uncovering serious, numerous or recurring findings may result in the agency being placed on a 120-day Quality Improvement Plan [QIP]. The intent of the QIP is to help the agency improve the areas of deficiency. As part of the QIP, IHCD monitors will make additional visits to the sub-grantee during the 120-day period to ensure changes are being implemented and all noted findings are being resolved. The QIP may be extended or modified as deemed necessary by IHCD to accomplish the needed sub-grantee improvement. IHCD also reserves the right to issue a modified QIP, which could encompass fewer visits or a modified timetable.
 - **A sub-grantee may be placed on QIP if the following technical performance deficiencies are identified:**
 - For a modified QIP, at least 25 percent of the homes monitored are deemed ineligible
 - For a QIP, at least 50 percent of the homes monitored are deemed ineligible
 - The average cost per home has exceeded cost guidelines identified in DOE and HHS funding
 - At least 50 percent of the homes monitored fail the combustion appliance zone testing
 - Issues with overall work quality or failure to meet work specifications as prescribed by the Field Guide SWS-Aligned Edition
 - **Sub-grantees who have been placed on a QIP will receive a higher level of scrutiny and monitoring from IHCD staff. Sub-grantees can expect for IHCD staff to:**
 - Review completion reporting on a more frequent basis
 - Perform DOE and LIHEAP fiscal analysis to ensure that the amount of funds claimed falls in line with the average cost per home based on completions entered into IWAP
 - Additional monitoring of claims submitted for payment
 - Training and technical assistance for program and administrative staff that will be customized to mitigate performance deficiencies
 - Additional onsite visits, as needed to monitor the agency’s progress in correcting the performance deficiencies
 - At least four additional homes monitored for a modified QIP and up to eight additional homes for a standard QIP

703 MONITORING PROCESS FOR STANDARD DOE ALLOCATIONS

Program Monitoring

IHCDA's staff and contracted monitors prepare the monitoring schedule and contacts each sub-grantee to establish the necessary appointments. Requests for Program and/or Financial Monitoring include notification of the client files chosen for review and all additional information such as financial, procurement, training, etc. Upon completion of the Program Monitoring IHCDA's monitor will perform an exit interview to summarize any issues discovered during the monitoring and offer suggestions for improvement. Within thirty business days of the exit interview IHCDA will issue a written report to the sub-grantee. The sub-grantee will then have fifteen business days as outlined within IHCDA's report to respond in writing to IHCDA. Upon receiving the sub-grantee's response, IHCDA's monitor will review the documentation and clear the monitoring as warranted. If additional information is required from the sub-grantee, IHCDA will issue a follow-up response detailing what information is needed with an appropriate deadline for the response. This process will continue until all items in the report are cleared and the monitoring closed.

Technical Monitoring

IHCDA's monitoring staff prepares the monitoring schedule and contacts each sub-grantee to establish the necessary appointments. Requests for Technical Monitoring include a list of desired homes to visit as well as alternates should clients not be available the date of the visit. Upon completion of the Technical Monitoring IHCDA's monitor will perform an exit interview to summarize any issues discovered during the monitoring and offer suggestions for improvement. For Technical Monitoring visits, an exit interview may be delayed, conducted via telephone or other means as situations permit and the parties agree. Within thirty business days of the exit interview IHCDA will issue a written report to the sub-grantee. The sub-grantee will then have fifteen business days as outlined within IHCDA's report to respond to IHCDA. Upon receiving the sub-grantee's response, IHCDA's monitor will review the documentation and clear the monitoring as warranted. If additional information is needed from the sub-grantee IHCDA will issue a follow-up response detailing what information is needed with an appropriate deadline for response. This process will continue until all items in the report are cleared and the monitoring closed.

- **Sub-grantees are prohibited from revisiting client homes chosen by IHCDA for Technical Monitoring. Homes that are found to have been "revisited" prior to the Technical Monitoring visit will result in at least one additional home being selected for monitoring. Additionally IHCDA may, at their discretion, require a Return of Funds for all expenses associated with the revisited home thereby removing it as a completed unit.**

704 LIHEAP PROGRAM AND TECHNICAL MONITORING

Monitoring for LIHEAP and STATE LIHEAP funds will be performed in conjunction with DOE monitoring and/or as deemed necessary by IHCDA. LIHEAP and STATE LIHEAP monitoring practices will be the same as outlined above for DOE with the exception of the percentage of client file and technical completions monitored. The percentages for client file and technical monitoring will be

determined by IHCDCA based upon funding levels and sub-grantee performance.

For homes utilizing DOE and LIHEAP funds both funding sources are monitored as outlined above. IHCDCA estimates that approximately 60% of Weatherization completions in Indiana utilize both DOE and LIHEAP funding.

705 MONITORING NOTES

- IHCDCA reserves the right to question all associated costs and may require that the sub-grantee repay grant funds to IHCDCA out of private agency funds or non-federal dollars. Examples requiring a Return of Funds are the following: insufficient justification for work performed, insufficient documentation, ineligible clients, lack of adherence to policy or Federal guidelines or negligence is evident resulting in a dangerous condition for a client.
- IHCDCA monitoring staff may use alternate procedures or request additional information to verify compliance when it is necessary or deemed appropriate.
- Failure by the sub-grantee to respond in writing to the monitoring report by the established deadline may result in claims being held by IHCDCA until the proper response is received.
- IHCDCA regularly tracks DOE, LIHEAP and State LIHEAP expenditures, production and average cost per home.
 - IHCDCA may, at their discretion, reallocate funding during the grant cycle should grant tracking reveal low sub-grantee expenditure or production rates as well as issues with their average cost per home.

Sub-Grantees failing to spend at least 80% of their awarded grant funds could be subject to funding allocation reduction or redistribution at IHCDCA's discretion.

SECTION 800

REPORTING

801 MONTHLY AND QUARTERLY REPORTING

Data for production and claims should be added to Indiana Weatherization Assistance Program (IWAP) (*Section 810*) and IHCDOnline (*Section 811*) on an ongoing basis. Timely entry of all weatherization information ensures that current data is relayed to the appropriate federal funding source and in turn could be used by the federal government to justify future appropriations. IHCD is currently required to submit quarterly production reports to the DOE.

Production Reports that are used for monthly reporting to DOE include: Closeouts (*section 404*), Desktop Monitoring (*section 803*) and Spending/Production Benchmarks (*section 804*). Reports are pulled at least monthly by IHCD from the IWAP database and IHCDOnline to review production and spending information recorded by sub-grantees. Sub-grantees are strongly encouraged to enter completions into IWAP within thirty days of the final inspection.

802 REPORTING REQUIREMENTS TIMELINES

IHCD is required to report on sub-grantee progress on an ongoing basis. Reporting is completed in the IWAP database and IHCDOnline system. The following is a list of Reporting Requirements:

Daily/Ongoing	Completions entered in IWAP
Monthly	Online Claims

803 DESKTOP MONITORING

IHCD will closely monitor claims and average cost per unit on each grant throughout the active grant period. A consistent level of production, spending and reporting throughout the grant year is indicative of good program management and demonstrates that a sub-grantee is able to efficiently manage available resources. IHCD emphasizes the importance of blending all sources of funding throughout the year and attempting to use LIHEAP funds in conjunction with each DOE unit.

IHCD will examine sub-grantee's status on production, spending/claims and reporting in comparison with the established benchmarks on the sub-grantees budget form. This information along with incentive pool qualifications and technical monitoring results will be taken into account when issuing grants, distributing additional funds as they become available or under circumstances when IHCD, in its sole discretion, deems it is necessary to de-obligate

and/or re-distribute all or any portion of a sub-grantee's grant funds.

Below is the schedule IHCD A will follow regarding benchmark and average cost per home tracking for DOE and LIHEAP programs:

- **Benchmark review/ Average cost analysis**

- June 30: DOE WX 1qtr LIHEAP WL 3qtr
- Sept 30: DOE WX 2qtr LIHEAP WL Closeout
- Dec 31: DOE WX 3qtr LIHEAP WL 1qtr
- March 31: DOE WX Closeout LIHEAP WL 2qtr

804 SPENDING AND PRODUCTION BENCHMARKS

For those sub-grantees who are substantially under-spent or under-produced, a request may be made for a meeting and/or conference call with the IHCD A Chief Community Programs Officer and/or the Community Programs Manager to discuss its progress on the program. Additionally, IHCD A may require additional planning documentation and reporting. Under circumstances where a sub-grantee fails to display adequate progress and/or fails to provide a definitive plan for the remainder of the grant period, IHCD A reserves the right to decrease the amount of the grant and reallocate funds to other sub-grantees. Funding for all grant programs will be reconsidered on a quarterly basis.

805 RECORD RETENTION AND DISPOSAL

Sub-grantee shall maintain all records relative hereto during the effective period of each grant agreement and for a period of three (3) years from the date sub-grantee submits to IHCD A its final financial status report, or one (1) year from the resolution of any outstanding administrative, program or fiscal audit question, or legal action, whichever is later. The retention period for records relating to any equipment authorized to be purchased with grant funds begins on the date of the disposition, replacement, or transfer of such equipment (including vehicles).

Sub-grantee shall protect all electronic and hardcopy documentation containing confidential client information. Confidential information means any individually identifiable information about the participants who receive services and/or assistance from grantees and/or sub-recipients of the IHCD A. Sub-grantee shall properly dispose of any electronic or hard copy documentation containing confidential client information after the required retention period. A "proper" disposal of this information is one that is reasonable and appropriate to prevent any unauthorized access to confidential client information. Approved disposal methods include:

- Burn, pulverize, or shred papers containing confidential client information so that the information cannot be read or reconstructed;
- Destroy or erase electronic files or media containing confidential client information so that

- the information cannot be read or reconstructed;
- Conduct due diligence and hire a document destruction contractor to dispose of confidential client information.

806 REQUIRED FORMS ON FILE

All sub-grantees must execute and submit the following forms at least annually and update as necessary. All forms can be requested through IHCD from the Community Programs Analyst. The following forms must have an original signature. No faxed, scanned or stamped signatures will be accepted.

1. Authorized Signature Form – Person(s) authorized to sign grant agreement and claims – must be notarized for each signer. This form must be submitted with each new grant agreement.
2. Direct Deposit Form – account where claim payments will be deposited. This form can now be completed online.
3. Tax Form W9 – Request for Taxpayer Identification Number and Certification. This form need only be resubmitted if changes are made.
4. Registered CCR and DUNS Numbers (numbers only no signature necessary). This information need only be resubmitted if changes are made.

807 CONTRACTOR PROCUREMENT, PRICE LISTS, RESPONSIBLE CONTRACTORS

Sub-grantees must follow proper procurement procedures when acquiring goods and/or services for the weatherization program. See grant agreement Section III, J and 10 CFR 600 Subpart B for federal rules and regulations concerning procurement.

To assist this process, DOE issued a Procurement Tool Kit in 2009 and updated it in 2012 that provides templates, checklists and guidance for procurement of weatherization materials and services. To download or review the DOE Procurement Tool Kit or documents, see IHCD's website at <http://www.in.gov/myihcd/2351.htm>

807.1 Contractor Procurement and Price Lists

Sub-grantees must either bid each weatherization job individually or develop a price list for contractor costs. If a price list is developed, each sub-grantee must follow federal regulations as outlined in 10 CFR 600, rebid at least every two years and perform a cost analysis of its current price list. Written procedures and documentation must be maintained at the sub-grantee's office and provided to IHCD or DOE upon request.

Whether the sub-grantee chooses to bid out each job or work off of an established price list, sub-grantees must establish in their written procedures whether their process for accepting contractors is open year round, once per year or multiple times per year. If each home is individually bid, copies of all bid packets must be included in the client file.

The following procedures must be included in Contractor Procurement and Establishment of a Price List:

- Must be publicly bid with advertising using newspapers, websites or hard copy and be available for at least three (3) business days.
- Fair and open competition must be provided.
 - The process must take place annually unless the sub-grantee's written procedures manual specifies every two years.
 - If bid packets will be mailed or emailed to existing contractors, a list must be kept of interested contractors.
 - The solicitation must include a clear and accurate description of the service or material being procured.
 - Written selection procedures must be established and available for review.
- Deadlines must be established and adhered regarding responses to packets.
- A cost or price analysis must be performed for each procurement process or the sub-grantee may establish an annual price list.
- Materials and labor are the most common items to be bid out for a price list.

Miscellaneous items are optional price list items. If they are not included on a price list, the sub-grantee must demonstrate that prices paid for both labor and materials are reasonable based upon market prices.

807.2 Responsible Contractors

All contractors awarded contracts by weatherization sub-grantees must annually review their contractors against the federal contractor disbarment list accessed at <https://www.epls.gov/>. If a contractor is listed on the Excluded Parties List System website, sub-grantees should not enter into a contract for goods or services paid with DOE or LIHEAP funds.

807.3 Removal or Suspension of Contractors

Overview:

A major goal of the IHCDCA Weatherization Assistance Program (WAP) is that the homeowners receive services in a safe, effective and efficient manner. IHCDCA's intent is that contractors that provide weatherization assistance services are qualified, competent and demonstrate a high degree of professionalism. To this end, IHCDCA has developed a policy that detail's when a contractor can be disciplined and/or suspended from performing weatherization services that are funded through IHCDCA's Weatherization Assistance Program. This policy shall apply to any contractor, contractor employees, or sub-grantee crew members that are providing weatherization services as a part of the Weatherization Assistance Program. Under this policy the contractor, contractor employees or sub-grantee crew members can be disciplined in the

following manner: (1) denied participation until remedial training, as directed by IHCD, is completed; (2) denied participation in the WAP for a period up to two (2) years; (3) suspended or debarred permanently under IHCD's Suspension & Debarment Policy as described below. The following violations by contractors and/or crews can lead to disciplinary action.

Violations:

- A. Repeated occurrences of failed Combustion Appliance Zone (CAZ) testing resulting in re-work;
- B. Repeated occurrences of failing to properly complete required heating systems forms ;
- C. Repeated monitoring findings related to the contractor or persons performing the work;
- D. Repeated incidents of unsatisfactory, sub-standard work performance;
- E. Repeated incidents of sub-grantee having to repay funds related to poor work performance by contractor;
- F. Repeated incidents of violating IHCD, DOE or LIHEAP program requirements;
- G. Fraudulent activity or fraudulent charges that are being reimbursed by the Weatherization Assistance Program; or
- H. Negligent work performance that leaves clients or other workers in imminent danger (Health and Safety- i.e., carbon monoxide allowed to enter the home or gas leak not addressed).

Consequences:

- 1. Remedial Training. A contractor or persons performing work that fall under any of the categories (A- B) will be recommended for remedial training and will be denied participation until remedial training is completed.
- 2. Denial of Participation. A contractor or persons performing work that fall under any of the categories (C-F) can be denied participation for up to 2 years.
- 3. Permanent Debarment. A contractor or persons performing work that fall under category (G and H) will fall under the IHCD Suspension & Debarment Policy, which could lead to permanent debarment from providing weatherization services funded through IHCD's Weatherization Assistance Program.

Sub-grantees are advised to make sure that contracts with sub-contractors specify remedies for breach of the provisions of the contract including termination. In addition, sub-grantees should provide a copy of this policy to its contractors. Reference Appendix Z

808 VEHICLES, EQUIPMENT, SUPPLIES

808.1 Inventory of Equipment and Vehicles

Sub-grantees are required to compile and maintain, on an annual basis, an inventory of all capital equipment (including vehicles) and supplies in sub-grantee's possession purchased with federal or IHCD funds. IHCD defines equipment as tangible, nonexpendable, personal property having a useful life of more than one (1) year and an acquisition cost that exceeds \$5,000.00. Supplies are defined as all tangible personal property other than "equipment" as defined above. An inventory must be maintained at the sub-grantee's office and provided to IHCD upon request. The inventory will include:

1. A brief description of the property;
2. A manufacturer's serial number, model number, federal stock number, national stock number, or other identification number of the property;
3. The funding source of the property, including the award number;
4. Whether the sub-grantee, IHCD or federal government holds the title;
5. The acquisition date (or date received, if the equipment was furnished by the federal government);
6. Information from which one can calculate the percentage of federal participation in the cost of the equipment (not applicable to equipment furnished by the federal government);
7. The location and condition of the property and date the information was reported;
8. Unit acquisition cost; and
9. Ultimate disposition data including the date of disposal and sales price.

Sub-grantees will be required to submit all relevant depreciation schedules applicable to the audit period at the time its independent audit report is submitted. Sub-grantees must develop an inventory control system that includes adequate safeguards to prevent loss, damage or theft of the property and maintain adequate maintenance procedures to keep property in good condition. Sub-grantees further agree to comply with any additional requirements that IHCD may deem necessary with respect to the management and distribution of equipment purchased. Sub-grantees may not purchase or maintain inventory which exceeds an amount necessary for the performance of this agreement. An annual review of inventory will be sent by IHCD to sub-grantees who have purchased vehicles and equipment.

808.2 Use of Equipment and Vehicles

- Any equipment and supplies purchased with federal or IHCD funds shall be used by the sub-grantee in the program or project for which it was acquired as long as needed, whether or not the project or program continues to be supported by Federal funds. When the equipment is no longer needed for the original program or project, the equipment may be used in other activities or programs currently or previously supported by a Federal agency, provided that such use will not interfere with the work on the projects or program for which it was originally acquired. First preference for

other uses shall be given to other programs or projects supported by DOE. User fees should be considered if appropriate.

- The sub-grantee cannot use equipment acquired with DOE grant funds to provide services for a fee to compete unfairly with private companies that provide equivalent services. See 10 CFR 600.135(b) for details.

When acquiring replacement equipment, the sub-grantee may use the equipment to be replaced as a trade-in or sell the property and use the proceeds to offset the cost of the replacement property, subject to the approval by IHCD. See 10 CFR 600.135 for details.

808.3 Vehicle Titles

When purchasing a new vehicle with federal grant funds, the title shall list Indiana Housing and Community Development Authority (IHCD) as the lien holder and the sub-grantee as the owner. The title must be mailed to IHCD to the attention of the Community Programs Analyst. All titles will be held at the IHCD office. See 10 CFR 600 for details.

808.4 Sale of Vehicles or Equipment

In order to sell a vehicle or equipment having a fair market value greater than \$5,000.00 that was purchased with DOE funding, the sub-grantee must contact IHCD for further instructions. In order to sell a vehicle or equipment having a fair market value that is greater than \$5,000.00 that was purchased with LIHEAP funds, a sub-grantee must document the following actions before the sale.

1. Determine how your organization will sell the equipment/vehicle. This can be a public sale, a trade in with a dealer or a sale to another department of the sub-grantee.
2. Research current market value for the equipment/vehicle (ex. Kelley Blue Book, local comparable prices through dealers) Keep copies of documented values.
3. Advertise the sale of the equipment/vehicle via a public notice for at least three (3) days in a local newspaper. If possible, sub-grantees should use all available media outlets for publication, including websites and agency publications.
4. The advertisement should include a minimum price and a reasonable time frame for offers to be accepted.
5. There should be an open bidding process with the sale going to the highest offer. All vehicle sales must have at least two documented offers, and must be sold at or above the highest offer. (If the vehicle is up for private sale or a sale to another department of the sub-grantee because the agency feels as though a better price can be achieved through private sale than through trade-in, the sale price may not be lower than the offered trade-in value)
6. An email or letter must be written to IHCD to request the release of the title. Include in your correspondence: your intent to either trade in or sell the equipment, your process, and documentation of the offer. The letter must be signed by the sub-grantee

Executive Director. It will take at least five (5) business days for IHCD to release the title and mail it back to the sub-grantee for the sale. (If the sale is to another department within the sub-grantee, an email to the Community Programs Manager or Community Programs Analyst can result in the transfer of the title to another IHCD department)

7. If a sale, the income from the sale is to be returned to IHCD for redistribution under the current LIHEAP grant.
8. If the vehicle/equipment is used as a trade-in for a replacement vehicle/equipment, the value of the trade-in is applied to the purchase price of the new replacement vehicle/equipment.

Equipment sales by non-profit entities purchased with DOE funds should follow 10 CFR 600.232 (c-e).

808.5 Disposal of Equipment and Vehicles (less than \$5,000.00) and Supplies

- Upon termination or completion of the award, the sub-grantee must compensate DOE for its share of unused inventory and supplies (including tangible, nonexpendable, personal property having a useful life of more than one (1) and having an acquisition cost of less than \$5,000.00) when the aggregate fair market value of these items exceeds \$5,000.00. This applies to residual inventory from ARRA or SERC funds of unused supplies (including tangible, nonexpendable, personal property having a useful life of more than one (1) and having an acquisition cost of less than \$5,000.00.) exceeding \$5,000.00 in total aggregate fair market value upon termination or completion of the award if the inventory and supplies are not needed for any other federally-sponsored programs or projects.
- Inventory, supplies, equipment, and vehicles purchased with ARRA, SERC, or DOE funds of any value can be used by another weatherization program (such as the DOE annual allocation or LIHEAP), in this case, the sub-grantee can transfer the supplies and equipment without further obligation to DOE or the State of Indiana. However, the sub-grantee must ensure that the tracking and accounting of the remaining inventory is in accordance with its established policies and procedures.
- If the sub-grantee is transferring to another federally funded program, outside of weatherization, within the sub-grantee's organization, the program purchasing the inventory, supplies, equipment or vehicles must compensate the program selling it at a fair market rate. Proceeds are reinvested in the weatherization program. See section 808.4 or below for sales details.
- If the sub-grantee is no longer providing weatherization services and does not have another federally-funded program to transfer the equipment, inventory, supplies, or vehicles to, regardless of whether the \$5,000.00 fair market value aggregate threshold is met, these items must be sold in a public sale and the funds returned to DOE by check written to IHCD. A second option is to return the items to IHCD without any further financial obligations.

In order to sell any tangible, nonexpendable, personal property having a useful life of more than one (1) and a fair market value less than \$5,000.00 that was purchased with LIHEAP, ARRA, DOE or SERC funds, a sub-grantee must document the following actions before the sale.

1. Inventory the supplies/equipment the sub-grantee wants to sell.
2. Set up the sale as a public sale.
3. Research current market value for the supplies/equipment. Keep copies of documented values such as website catalog prices, quotes from suppliers, etc.
4. This must be a public sale.
5. Advertise the sale of the supplies/equipment via a public notice for at least three (3) days in a local newspaper.
6. There should be a closed bidding process with the sale going to the highest offer. All sales must have two documented offers and must be sold at or above the highest offer.
7. The advertisement should include a minimum price per item and a reasonable time frame for offers to be accepted.
8. If a sale, the income from the sale is considered "Program Income" to the funding source that purchased the supplies/equipment. If the supplies/equipment were purchased with ARRA or SERC, the proceeds must be recorded as income to the current DOE annual allocation grant program year and used to enhance the sub-grantees Weatherization Assistance Program. Follow policy manual section 403- Program Income for details.
9. Only supplies purchased and reimbursed with ARRA funds need to be sold. If purchased with sub-grantee funds, supplies can be transferred to the DOE or LIHEAP weatherization program without further documentation.

Supplies sales by non-profit entities purchased with DOE or ARRA funds should follow 10 CFR 600.135.

808.6 Rental of Vehicles, Equipment and Supplies

Rental of vehicles or equipment to other sub-grantee departments, other nonprofits or a for-profit entity is only allowable if the sub-grantee continues to use the item at least twenty-five percent (25%) or more of the time for the current weatherization grant programs.

If supplies, equipment or vehicles are being rented, the following must be documented in your files for future monitoring:

1. A rental fee can be charged for the use of supplies, equipment, and vehicles purchased with LIHEAP funds. Any income received must be recorded as program income.
2. The allowable rental fee charged may not be less than private companies charge for equivalent services. See 10 CFR 600 (600.134 (b) Equipment).

Documentation of comparable rental rates must be secured from at least two sources prior to

establishing a rental rate for supplies, equipment, or vehicles. If two market rates cannot be found, a rate can be set based on the cost of the equipment and the useful life of the equipment including maintenance costs. File documentation must contain the two documented comparable market rental rates or rental rate calculation and accounting detail for the rate charged, department or entity paying the rental, and rental payments received and applied to Program Income.

809 BID PROCEDURE FOR EQUIPMENT PURCHASES

Weatherization specific equipment with a unit cost of greater than \$5,000.00, such as vehicles, may be purchased with the LIHEAP Equipment line item. Equipment requires prior written approval from IHCD before the purchase is made. All requests must follow IHCD bid procedure to be considered for approval. See section 808 Vehicle and Equipment sales or rental procedures.

Bid procedure:

1. Bid Specifications
 - Write specifications for the item you are requesting to purchase – make, model, features, year, new/used, etc.
 - Specifications should be specific to the organization's needs but not so specific as to pin point an already selected item.
2. Solicit Bids
 - Mail, email or deliver bid specifications to local dealers or companies to solicit bids
 - A minimum of three bids must be solicited and submitted.
 - If you do not receive three bids or the bids did not meet the specifications, bids may be selected based on a similar make and model. This is only true for unique items.
3. Bid Selection
 - Review and select a bid that meets your bid specifications.
 - If this bid is not the lowest bid, please specify why it was chosen.
 - Priority should be given to bids meeting the specific bid description.
4. Requesting approval from IHCD
 - Mail or email a letter with an authorized signature to the IHCD Community Programs Manager.
 - The letter should describe your bid process, your selected bid and the reason for your choice.
 - Attachments should include your bid specification, a list of companies or dealers solicited and three bids meeting your specifications.
5. IHCD Approval
 - If your request is complete, a letter will be sent via email approving your purchase.

- Incomplete requests will delay approval and may require rebidding for valid bids.
- IHCDCA will respond within five business days with questions or approval.

DOE issued a Procurement Tool Kit in 2009 and updated it in 2012 that provides templates, checklists and guidance for procurement of weatherization materials and services. To download the DOE Procurement Tool Kit or documents, see IHCDCA's website at <http://www.in.gov/myihcda/weatherization.htm> . To ensure that procurement standards are properly followed, IHCDCA requires a minimum of three bids on all transactions or purchase of services totaling \$5,000.00 or more. To be considered proper procurement the three bids must be obtained from three independent sources.

810 INDIANA WEATHERIZATION ASSISTANCE PROGRAM DATABASE (IWAP)

The Indiana Weatherization Assistance Program Database (IWAP) was created by Roeing Corporation specifically for Indiana's weatherization program. Data is recorded in the system for many aspects of the program including:

- Unit Completions – client info, job info, job costs, measures, contractors
- Wait Lists

As a result of this data input, reports can be generated for each funding source daily, monthly, quarterly and lifetime of the grant. These reports can be used by IHCDCA staff and monitors to review progress and for compliance. Questions or problems concerning the database should be directed to IHCDCA staff and may be referred to Roeing.

IWAP is a web-based database and can be accessed at the following link: <https://ihcdaonline.com/wap/IWAPlogin.aspx>. Below are instructions on the use of IWAP. This is arranged based on the order a sub-grantee will use the system with a new client. IWAP offers a training database/test site at <http://test.roeing.com/iwap/>. You will need to contact the Community Programs Analyst for a username and password.

810.1 Administrator Privileges

All sub-grantees are given an original log on and at least one person is assigned as the Supervisor for each sub-grantee. The sub-grantee Supervisor has the ability to add, delete and modify access for the sub-grantee's employees. This is completed under Main Menu items "System Utilities" and "Maintain Users". New users are added at the bottom and current users can be updated by clicking their name. Only 1-2 people should have supervisor rights per sub-grantee. Most will need Report rights and Edit rights if they update files. Employees with these rights will have several grayed out fields that only a Supervisor can view or update. If the individual identified as the agency Supervisor leaves, the replacement Supervisor will need to contact the Community Programs Manager or Community Programs Analyst in order to assign permissions.

The IWAP database is linked to the EAP RIAA database. In order to delete an employee, their IWAP rights must be removed and possibly their RIAA rights. If you are unable to remove an employee's access completely in IWAP, contact your EAP RIAA Supervisor at your agency to also remove their RIAA access. Once the RIAA access is removed, you should be able to remove all IWAP rights.

The IWAP software has the ability to perform Ad Hoc Reporting. If an employee will be using the Ad Hoc Reporting portion of IWAP, click on the employee's name, add a check to the Ad Hoc Reporting box and have them log back into IWAP to access the new Ad Hoc Reporting.

810.2 Wait List (Main Menu Item)

"Wait List" is the last menu item in IWAP. This will access all of the sub-grantee's eligible clients and provide detailed information about the client based on their Energy Assistance Program (EAP) application. IHCD recommends continuing the use of the Wait list in order to connect with the EAP RIAA database and help Weatherization pull the most recently approved EAP application. It is also helpful that all the data entered in RIAA will flow into the new IWAP client record and avoid double entry.

Clients will be ordered based on their Matrix points determined by EAP. The highest number client (16) should be your first priority and working down the numbers.

Below is a quick guide to using the Wait List:

- The initial list is those clients who qualify in your service area in order of Matrix points.
- Only one wait list exists for DOE at this time.
- After your list is pulled, you can review a specific client by clicking their name. More detail about the client, comments from previous contacts and the most current EAP application will be listed.
- When you have identified a specific client and are ready to contact them, click "Add to Wait List".
- Each contact you make with the client should be recorded in the comment section and dated.
- When you are ready to serve this client, click on "Import into IWAP". This will create a new client file in IWAP and import the client's information. Note that a new "Application Key" will be created in IWAP.
- A client is on your wait list for up to 60 days. If no comments are recorded, the client will roll back into the master list.
- If another sub-grantee has already pulled a client on to their wait list, the sub-grantee will be listed in pink. This is necessary to avoid duplications.
- The benefits of utilizing the wait list within Roeing are as follows:
 - Tracking the number of eligible households within each county
 - Documentation and note keeping capability of client contact and progression

- through the Weatherization process
- Documentation of previous Weatherization services and the funding used to provide the services
- Tracking and documenting deferred homes

810.3 Completions (Current Clients – Main Menu Item)

A completion requires many steps before the sub-grantee receives a completed unit for a program. You can create a new client record in the two methods below. The first method is preferred if possible.

1. A new client file is started when you IMPORT a client from the IWAP Wait List.
 - Data transferred over is based on their EAP application.
 - This will also remove the client from the IWAP wait list.
2. If a client did not come through the EAP program (i.e.; 151%-200% of poverty qualification) then a new client file can be created in “Current Clients”.

A completed unit will be recorded after the following steps/menu items have worked through.

1. Application - This is the Client Information that comes from the EAP file and from the initial audit. This page must be completed before moving forward.
2. Job Information – This information comes from the initial audit.
4. Job Costs – identify the labor and material costs for the house/unit for both Base Program Operations and Health and Safety budget line items. The following other items can be entered on this page: Overhead costs, Funding Source, and dates for the Final Inspection, Invoice and Completion.

Funding Source	Completion Date	Rework	Contractor	Total Cost
DOE	1/10/2010	NO	CAP Agency	\$346.12
DOE	1/10/2010	NO	ABC Heating	\$1879.00
LIHEAP	1/10/2010	NO	CAP Agency	\$1155.00
LIHEAP	1/10/2010	NO	XYZ Insulation	\$816.89

NOTE: A contractor should only appear once per funding source with all expenses associated with that contractor and funding source totaled and placed in the Total Cost column.

Funding Source*	DOE
Completion Date*	12 / 17 / 2013
Contractor*	SAMPLE Contractor
Invoice Date*	11 / 25 / 2013
Final Inspection Date*	12 / 19 / 2013
Is Rework	<input type="checkbox"/>

NOTE: The Final Inspection Date should be the last day the home is touched. The Completion Date should never be before the Final Inspection Date.

5. Measures – click off measures completed in the unit.
6. Close Out – when the record is complete, click on the close out menu. Close the record to indicate a completion is ready to be reported to DOE.

810.4 Current and Historical Clients (Main Menu Items)

All Current Clients can be pulled up under this menu tab. The easiest method is by IWAP Application Key (which is different than the Wait List Application Key) but name and address can also be used.

All Historical Clients are archived clients from closed programs. These client files are locked and are for viewing only. A client completed more than 18 months prior will appear in the Historical Client list.

810.5 Reports (Main Menu Item)

A variety of reports can be pulled by the sub-grantee and IHCD staff, monitors and contract compliance companies.

- Quarterly Reports by funding source is the most useful report for the sub-grantee. This report needs to be checked for accuracy prior to submitting a funding source Close-Out Form (*section 404*). IHCD will compare this data to your Close-Out Reports to calculate average cost per home. Additionally, detailed demographics are summarized and used by IHCD for DOE monthly and quarterly reporting.
- Client Completion List will pull a completed client list per county or date range.

810.6 Refrigerator Calc (Main Menu Item)

This page is used to calculate refrigerator replacement costs administered by the utility

companies. INCAA administers this program and any problems with the program or the need to unlock a refrigerator record should be directed to Dan Phillips at INCAA 800-382-9895. This section will only be available if utility companies renew the program..

810.7 Client Record Unlock

If it is necessary to unlock a locked client record, please contact IHCD's Community Programs Manager or Community Programs Analyst for permission. You can request permission by email. Please include the client name, application key (generated in IWAP) and the reason the record needs to be unlocked. Once a record is unlocked, it will remain open 24 hours for editing. The record will automatically lock at the end of the 24 hour period. If a funding program is closed out, the record may not be accessible due to recording and reporting of data to Federal funding sources such as the Dept. of Energy.

811 IHCDOnline.com

All claims and reporting requirements on IHCDOnline.com are detailed in *Section 408* and *Appendix E*.

812 HISTORIC AND ENVIRONMENTAL REVIEWS

Weatherization activities funded by DOE and LIHEAP are only subject to Environmental and Historic Review processes if they fall outside of the scope of the agreement established between IHCD and the State Historic Preservation Office.

SECTION 900

HEALTHY HOMES Deferral Program

901 STATE-FUNDED HEALTHY HOMES Deferral PROGRAM

It is the intent of the Healthy Homes Program to decrease the number of homes that are deferred from the Indiana Weatherization Assistance Programs, and improve the health of the occupants and energy efficiency of the home.

Pursuant to I.C. 4-12-1-14.5, a limited amount of funds are allocated from the State of Indiana's portion of the mortgage foreclosure multistate settlement agreement to be used in newly created Indiana Home Energy Assistance Programs. The Healthy Homes Deferral Program will be funded out of the state's weatherization portion of the mortgage settlement. The program will operate under the same eligibility guidelines and program year as the State LIHEAP program.

Through various Department of Energy and Low Income Home Energy Assistance Programs, Indiana provides weatherization services to approximately 1,800 households annually. In addition to the 1,800 homes that do receive weatherization services, the state experiences a deferral rate of nearly 50%.

While clients may meet income eligibility requirements for weatherization, Sub-Grantees may defer a client because the housing unit is not a good candidate for weatherization. A deferral may occur due to problems that are beyond the scope of weatherization such as condition of the structure, area is slated for redevelopment or health and safety reasons. Please refer to Section 304 for an expanded view of Indiana's Deferral Standards.

In situations where the deferral issues cannot be addressed within the scope of the Weatherization Assistance Programs and the client does not have the means to resolve the deferral issues, the home may never receive services.

902 CLIENT ELIGIBILITY

The Weatherization sub-grantee staff, or its subcontractor, is obligated to review and determine eligibility status for the Healthy Homes Deferral Program based on the criteria below.

- Client must adhere to the HHS requirements of **150%** or below of the current OMB poverty guidelines
- Client's **Energy Assistance Programs application (EAP)** must be active at the time the weatherization services are provided and at the time of final inspection. An application is considered active for a twelve month period starting from the date of the approved application. Sub-grantees must utilize the most recent available application.
- If client is not an EAP recipient, income documentation must be in the file
- Dwelling must be a single family-owner occupied unit
- Dwelling must have undergone an initial audit and determination of deferral made
- Dwelling must have received a Home Heating Index (HHI) calculation
- Elimination of the deferral issues must result in the dwelling's immediate (within 12 months) eligibility for traditional weatherization services through DOE, LIHEAP or State LIHEAP
- Deferral expenses will not be eligible if dwelling does not receive traditional weatherization services within twelve (12) months of receiving deferral mitigation. At that time IHCD reserves the right to request repayment of funds received for deferral expenses (extenuating circumstances will be reviewed by IHCD)
- Dwelling cannot have previously been weatherized

903 REASONS FOR DEFERRALS

Deferrals may take place during any phase of the weatherization process, including but not limited to: during or after the initial audit, the work performance phase, or immediately following the identification of a health and safety risk to the occupants or to crew and contractors.

Below are examples of existing conditions under which a dwelling unit can be deferred but still eligible for Healthy Homes Deferral Program funds.

- Elevated carbon monoxide levels where abatement is not possible using WAP funds
- Existing moisture problems that cannot be resolved under the health and safety limits
- Presence of sewage or other sanitary problems that not only endangers the client, but the workers who will perform the weatherization work
- Building structure or its mechanical systems, including electrical and plumbing, are in such a state of disrepair that failure is imminent and these conditions cannot be resolved in a cost effective manner
- Any existing condition that could endanger the health and/or safety of the work crew or subcontractor and cannot be safely abated within the scope of weatherization

904 ALLOWABLE ACTIVITIES

Below is a list of activities that are within the parameters of the Healthy Homes program. All activities must have been previously determined as a cause for the home to be deferred.

- Mold remediation
- Moisture control
- Knob and Tube wiring issues
- Grading
- Minor roof repair
- Gutters
- Sump pump installation
- Pest control
- Measures not listed above require IHCDCA approval

To ensure the client receives the maximum benefit, we encourage you to think outside the box regarding the whole health and safety of the home. Additional items to consider are:

- Handrails
- Adequate lighting on stairs
- Grab bars in bathrooms

905 BUDGETARY LIMITS

- **Administration** – Actual costs associated with the administration include fiscal, executive, support operations, rent, utilities, supplies, etc. Total claimed cannot exceed 5% of the total amount expended.
- **Deferral** – *Actual costs for performance of necessary measures to resolve Deferral issues*

The maximum cost per home for metered fuel homes is calculated using the HHI and is detailed below. ***The “maximum cost” is not to be confused with the “average” cost per home of traditional weatherization programs.***

- HHI of 14 or above: \$7,500.00
- HHI of 13 or less: \$6,000.00

The HHI can be calculated through a form downloaded from INCAA’s site
<http://intelligentweatherization.org/billing-analysis-tools/>

The HHI calculation is not applicable to Non-metered fuel homes. Therefore the maximum cost for a non-metered fuel home is \$6,000.00.

State Healthy Homes Deferral Program funds can be combined with State LIHEAP, LIHEAP or DOE funding on the same unit. However, State LIHEAP Mechanical or Base funds cannot be combined with LIHEAP Mechanical or Base funds. Please refer to section 508 for a detail of funding source combinations.

906 REQUIRED FORMS

Client files must be kept to verify the work completed, track all expenditures and funding sources utilized. All forms listed in Section 200 are to be kept in the files of clients determined to be eligible for the Healthy Homes Program.

*Note: The Landlord Rental Agreement would not be necessary as only **homeowners** are eligible for this program.*

907 TRACKING DEFERRAL FUNDS

Each sub-grantee must track the use of Deferral expenses in IWAP just as Health & Safety expenses are. Deferral expenses will be captured in the “Total Cost” but not in the “Total Completion Costs”.

Each sub-grantee must complete and submit the spreadsheet (see appendix W) with the State LIHEAP closeout.

APPENDICES

APPENDIX A: EAP Application

ENERGY PROGRAMS APPLICATION State Form 14381 (R14 / 10-04) / HCS 0012										APPLIED AT		APPLIED FOR		TANF		FAMILY TYPE		Date Ref'd to WAP or Date W'ded			
										<input type="checkbox"/> Office <input type="checkbox"/> Mail-in <input type="checkbox"/> Homebound		<input type="checkbox"/> EAP <input type="checkbox"/> WAP <input type="checkbox"/> Summer Fill <input type="checkbox"/> Summer Cool		<input type="checkbox"/> TANF (current) <input type="checkbox"/> Non-TANF		<input type="checkbox"/> Single Parent / F <input type="checkbox"/> Single Parent / M <input type="checkbox"/> Two Parent <input type="checkbox"/> Single Person <input type="checkbox"/> Two Adults / No Children <input type="checkbox"/> Other		<input type="checkbox"/> Would you like to receive information on Lifeline/Link-Up? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Would you like to receive information on Hoosier Rx, Indiana's Drug Prescription Program? <input type="checkbox"/> Yes <input type="checkbox"/> No TOTAL MATRIX POINTS:			
Name of agency					County					Site											
Name of head of household (last, first, middle initial)					Social Security number (head of household)																
Address (number and street, city and ZIP code)					Telephone number / type																
HOUSEHOLD MEMBERS					SEX	DATE OF BIRTH	AGE	EDU	DIS	SOCIAL SECURITY NUMBER	VET	INC CODE	ANNUAL INCOME	ETHNICITY	RACE	HLTH INS					
1. (Head)																					
2.																					
3.																					
4.																					
5.																					
6.																					
7.																					
8.																					
INCOME LEVEL					TOTAL ANNUAL INCOME					\$											
INCOME CODES					ETHNICITY					RACE CODES											
A. Employment Earnings B. Social Security C. Temp. Assist. Needy Families (TANF) D. Unemployment Comp. E. Suppl. Sec. Inc. (SSI) F. Veteran's Benefits G. Pension / Retirement H. Child Support I. Interest / Dividends J. Self Employment Income K. Other:					A. Hispanic or Latino B. Not Hispanic or Latino					A. Black or African American B. White C. Other (Asian, Native Hawaiian or other Pacific Islanders and all others) D. Multi-Race (any 2 or more of the above) E. Native American											
DATE					COMMENTS																
PRIVACY NOTICE STATEMENT This agency is requesting disclosure of personal information that is necessary to accomplish its statutory purpose. IC 4-1-5-2(a)																					
SOCIAL SECURITY NUMBER DISCLOSURE STATEMENT This agency is requesting disclosure of your Social Security number in order to expedite processing of your application. Disclosure is mandatory. IC 4-1-5-1(a)(3)																					
APPEAL INFORMATION If you are denied and do not agree with the reasons stated, or if your application for services is not processed in a timely manner, you may appeal the decision to the Community Action Agency for review. If you are not satisfied with the CAA determination, you may request further review from the State of Indiana by submitting an Applicant Notification form to the Division of Family and Children.																					
CERTIFICATION OF THE INFORMATION STATEMENT I certify that the above information provided is correct and true to the best of my knowledge. I understand that I may be required to verify these statements and give my consent to the agency from which I am requesting assistance to make any necessary contacts to verify these statements. I am a resident of Indiana and an applicant for the Energy Assistance and/or Weatherization Assistance Program(s). I acknowledge any services or materials provided to my household will be a gift without consideration or payment by me. I give permission to the State of Indiana and the agency from which I am requesting assistance to obtain information from my energy supplier about my energy usage and payment history. I understand that the State of Indiana may use information provided on this form for purposes of research, evaluation, and analysis. I hereby release the State of Indiana, the Community Action Agency or other entity from any liability whatsoever resulting from delivery of these activities. I have received no expressed or implied warranties concerning my receipt of these services.																					
HOUSING <input type="checkbox"/> Non-subsidized <input type="checkbox"/> Non-subsidized / Heat Included <input type="checkbox"/> Subsidized / Heat Not Included <input type="checkbox"/> Subsidized / Heat Included					HEAT FUEL <input type="checkbox"/> Kerosene <input type="checkbox"/> LP Gas <input type="checkbox"/> Oil <input type="checkbox"/> Wood <input type="checkbox"/> Coal <input type="checkbox"/> Electric <input type="checkbox"/> Natural Gas Secondary Fuel:					Billing name Account number Benefit: \$ Date (month, day, year) Crisis: \$ Date (month, day, year) Cooling: \$ Date (month, day, year) Reserved (checked): <input type="checkbox"/> Fan <input type="checkbox"/> Air Conditioner					HOUSING Billing name Account number Benefit: \$ Date (month, day, year) Status:						
Signature of applicant Date (month, day, year)					Relationship Signature of agency representative																

DISTRIBUTION: White - Local Agency; Canary - Local Agency; Pink - Applicant

APPENDIX B: DOE Grant Agreement

Can be found online at <http://www.in.gov/myihcda/weatherization.htm>

LIHEAP WEATHERIZATION ASSISTANCE PROGRAM 2016**BUDGET NOTES:**

Equipment/ Services: List projected equipment purchases in excess of \$5,000 and services purchases in excess of \$25,000 (Use additional page if necessary). Prior written approval from IHCD is required before purchase can be made utilizing grant funds.

EQUIPMENT/SERVICES ITEMS	COST

EXPLANATION OF LINE ITEMS:

- .1 **ADMINISTRATION:** Sub-grantees may use up to 6.753% of total Weatherization expenditures. Costs associated with administration include fiscal, executive, support operations, rent and utilities, supplies etc. This applies to *staff engaged in program administration*.
- .2 **LIABILITY INSURANCE:** Insurance coverage of \$ 750,000.00 covering the risks related to the property and personal liability claims of other parties against the insured party.
- .3 **SUPPLIES:** Direct costs of Weatherization specific supplies such as monoxers, blower doors, draft gauges, combustion analyzers, Sensit Heat exchanger test kits. *The limitation is a unit cost less than \$5,000 dollars.*
- .4 **EQUIPMENT:** Weatherization specific equipment such as vehicles with a unit cost *in excess of \$5,000* may be purchased under this line item. Prior written approval from IHCD is required before purchase.
- .5 **BASE PROGRAM OPERATIONS:** are direct costs and include the following:

The maximum allowable average costs per house may not exceed \$7,000.00 effective October 1, 2015.

Sub-grantee Labor Costs: includes compensation of employees whose time and effort is directly involved in material installation, general office support, such as, but not limited to, crewmembers, estimators, inspectors, coordinators, and support staff. **Where employees work on multiple activities, a distribution of their salaries or wages must be supported by equivalent documentation of the activity percentage of work by the employee.**

Contracted Labor: Cost of professional services rendered by persons who are members of a particular profession or possess a special skill and are not sub-grantee staff.

Non-labor Program Support includes direct costs of rent and utilities for sub-grantee labor, advertising, consumable supplies, office equipment, furnishings, and computer equipment. Purchases charged will be at their actual prices after deducting all cash discounts, trade reimbursements, discounts or rebates and allowances.

Materials: Costs of installed materials by sub-grantee and contracted labor.

Material Handling: Actual costs including Warehousing Facility Costs such as leases, utilities and security.

Transportation costs associated with material delivery, staff transportation to the work sites, vehicle maintenance and depreciation. Direct costs of staff including salaries, purchases etc. whose tasks involve with

Inventory control. Where employees work on multiple activities, a distribution of their salaries or wages must be supported by equivalent documentation of the activity percentage of work by the employee.

- .6 **MECHANICAL OPERATIONS:** are direct costs associated with testing and evaluation of mechanical systems where at least \$300.00 has been obligated for work on combustion appliances in a dwelling. Allowable expenditures include sub-grantee labor costs, contracted labor, materials, and manufacturing of weatherization equipment as outlined above in the .5 Program Operations line item. ***The maximum allowable average amount is \$4,500.00 effective October 1, 2015.***
- .7 **CAPITAL INTENSIVE OPERATIONS:** are direct costs that include at least \$300 in mechanical systems repair or maintenance and base program functions have been performed. Allowable expenditures include sub-grantee labor costs, contracted labor, materials, and manufacturing of weatherization equipment as defined above in the .5 Program Operations line item. ***The maximum allowable average amount is \$11,500.00 effective October 1, 2015.***

Enter the number of homes you foresee completing in each month. Enter the total number of homes to be completed and the average cost per home will calculate for you.

DOE WEATHERIZATION ASSISTANCE PROGRAM 2015-2016

Budget definitions: IHEDA

BUDGET NOTES AND EXPLANATION OF LINE ITEMS (Updated 3/10/15):

- .1 **ADMINISTRATION:** Grant related administration including: *fiscal, executive, support operations, rent and utilities, supplies, copying, etc.* This applies to staff engaged in program administration.

For funding associated with the 2015 DOE program year, Sub-grantee may allocate up to seven percent (7%) of total amount of funding claimed and expended during the DOE 2015 program year to the Activity Description entitled "Administration". Sub-grantee's total grant amount expended and claimed for "Administration" line item cannot exceed amount designated on the budget form..

- .2 **LIABILITY INSURANCE:** Insurance coverage is comprehensive general liability insurance coverage in the minimum amount of \$750,000.00 covering the risks related to the property and personal liability claims of other parties against the insured party. Liability insurance may include a Pollution Occurrence Rider.
- .3 **FISCAL AUDIT:** The cost of obtaining an independent fiscal audit. The amount charged is based upon sub-grantee cost allocation plan.

- .4 **BASE PROGRAM OPERATIONS:** are direct costs and include the following:

Program costs per house may not exceed \$7,000.00 - SEE NOTE BELOW

Sub-grantee Labor Costs: includes compensation of employees whose time and effort is directly involved in material installation, general office support, such as, but not limited to, crewmembers, auditors, building analysts, coordinators, and support staff. **Where employees work on multiple activities, a distribution of their salaries or wages must be supported by equivalent documentation of the activity percentage of work by the employee.**

Contracted Labor: Cost of professional services rendered by persons who are members of a particular profession or possess a special skill who are not members of the sub-grantee.

Non-labor Program Support includes direct costs of rent and utilities for sub-grantee labor, advertising, consumable supplies, office equipment, furnishings, and computer equipment. Purchases charged will be at their actual prices after deducting all cash discounts, trade reimbursements, discounts or rebates and allowances.

Materials: Costs of installed materials by sub-grantee and contracted labor.

Material Handling: Actual costs including Warehousing Facility Costs such as leases, utilities and security. Transportation costs associated with material delivery, staff transportation to the work sites, vehicle maintenance and depreciation. Direct costs of staff including salaries, purchases etc., whose tasks involve Inventory control. **Where employees work on multiple activities, a distribution of their salaries or wages must be supported by equivalent documentation of the activity percentage of work by the employee**

Manufacturing of Weatherization Equipment: direct costs of manufactured weatherization items subject to a unit cost of \$1,000 dollars per item or prior approval from state.

- .5 **HEALTH AND SAFETY:** Health and safety activities are defined as activities that eliminate hazards aggravated or caused by the installation of weatherization measures. These activities include all combustion appliances in a home. Combustion appliances and combustion gases, as noted by DOE in Weatherization

Program Notice 02-5, "pose the most serious hazard found in homes." Dealing with combustion gases in the home may require changing or repairing the venting on the appliance, or replacement of the water heater, furnace or space heater. Allowable costs can be for the evaluation, repairs, and/or replacement of the water heater, furnace or space heater.

For funding associated with the 2015 DOE program year, Sub-grantee may allocate up to twenty percent (20%) of total amount of BASE expended during the DOE 2015 program year to the Activity Description entitled "Health and Safety". Sub-grantee's total grant amount expended and claimed for "Health and Safety" line item cannot exceed amount designated on the budget form.

Enter the number of homes you foresee completing in each month. Enter the total number of homes to be completed and the average cost per home will calculate for you.

APPENDIX C-1 LIHEAP Budget Form

LIHEAP BUDGET FORM 2016



PERSON COMPLETING FORM:

INITIAL () YES

AMENDMENT #

MODIFICATION #

SEE BUDGET EXPLANATIONS IN POLICY AND PROCEDURES MANUAL

GRANTEE INFORMATION									
Agreement No: WL-016-						Program			
Grantee Name:						LIHEAP			
Address (Number, Street)						Closeouts Due			
Address (PO Box Number)						11/15/2016			
City, State, and ZIP Code+ Four (00000-0000)						Expiration of Agreement		Program Year	
						9/30/2016		2016	
LINE ITEM: ACTIVITY DESCRIPTION:						DOLLAR AMOUNT:			
.1	ADMINISTRATION (not to exceed 6.753% of grant amount expended)					#DIV/0!	\$0		
.2	LIABILITY INSURANCE						\$0		
.3	SUPPLIES (items under \$5000.00, approval not necessary)						\$0		
4	EQUIPMENT (items over \$5000.00 Community Program Manager's Approval Required)						\$0		
EQUIPMENT to be purchased:									
						Projected Number of	Average Cost-Per Home		
5	BASE PROGRAM OPERATIONS					#DIV/0!	\$0		
October November December January February March									
April May June July August September									
						Projected Number of	Average Cost-Per Home		
6	MECHANICAL OPERATIONS					0.00	#DIV/0!	\$0	
October November December January February March									
April May June July August September									
						Projected Number of	Average Cost-Per Home		
7	CAPITAL INTENSIVE OPERATIONS					#DIV/0!	\$0		
October November December January February March									
April May June July August September									
FILL IN ALL APPLICABLE BOXES AND SECURE SIGNATURE BELOW RETURN WITH YOUR AGREEMENT.						TOTAL DOLLARS		\$0	
This is to certify that I have reviewed this budget form and all proposed expenditures are properly allocable to the Federal award and any indirect costs budgeted in this form will not be treated as direct costs when claimed.									
Signature of Agency Executive Director or designee						DATE			
Signature of Program Manager (review required)									
Signature of IHCDA Community Program Analyst or designee									
Signature of IHCDA Director of Community Program Officer or designee									

APPENDIX C-2 DOE Budget Form

DOE BUDGET FORM 2015-2016	 Indiana Housing & Community Development Authority	PERSON COMPLETING FORM: ORIGINAL () YES AMENDMENT # MODIFICATION #															
<u>Please complete the non-shaded areas on this form</u>																	
SEE BUDGET EXPLANATIONS IN POLICY AND PROCEDURES MANUAL PREPARE A BUDGET FORM FOR EACH PROGRAM YEAR																	
GRANTEE INFORMATION																	
Agreement No: WX-015-	Program																
Grantee Name:	DOE																
Address (Number, Street)	DUNS Number																
Address (PO Box Number)	Expiration of Agreement																
City, State, and ZIP Code+ Four (00000-0000)	3/31/2016	Program Year															
2015-2016																	
LINE ITEM:	ACTIVITY DESCRIPTION:																
AMOUNTS ENTERED SHOULD BE ROUNDED TO NEAREST WHOLE DOLLAR																	
		DOLLAR AMOUNT:															
.1	ADMINISTRATION (not to exceed 7% of grant amount expended)	\$0															
.2	LIABILITY INSURANCE	\$0															
.3	FINANCIAL AUDIT COSTS	\$0															
.4	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: left;">Projected Number of Homes</th> <th style="text-align: left;">Average Cost-Per Home</th> </tr> <tr> <td style="width: 25%;">Apr-14</td> <td style="width: 25%;">May</td> <td style="width: 50%;">June</td> </tr> <tr> <td>July</td> <td>August</td> <td>September</td> </tr> <tr> <td>October</td> <td>November</td> <td>December</td> </tr> <tr> <td>January</td> <td>February</td> <td>Mar-15</td> </tr> </table>	Projected Number of Homes		Average Cost-Per Home	Apr-14	May	June	July	August	September	October	November	December	January	February	Mar-15	\$0
Projected Number of Homes		Average Cost-Per Home															
Apr-14	May	June															
July	August	September															
October	November	December															
January	February	Mar-15															
.5	HEALTH & SAFETY (not to exceed 20% of Base Program Operations expended)	\$0															
FILL IN ALL APPLICABLE BOXES AND SECURE SIGNATURE BELOW																	
RETURN WITH YOUR AGREEMENT .		TOTAL DOLLARS \$0															
This is to certify that I have reviewed this budget form and all proposed expenditures are properly allocable to the Federal award and any indirect costs budgeted in this form will not be treated as direct costs when claimed.																	
Signature of Agency Executive Director or designee		DATE															
Signature of Program Manager (review required)																	
Signature of IHCDA Community Program Analyst or designee																	
Signature of IHCDA Chief Community Program Officer or designee																	

APPENDIX D-1: LIHEAP Closeout Form

APPENDIX D-2: STATE LIHEAP Closeout Form

APPENDIX D- 3: DOE Closeout Form

Can be found online at <http://www.in.gov/myihcda/weatherization.htm>

APPENDIX E: IHCD Claim Submission Manual

Can be found http://www.in.gov/myihcda/files/IHCD_Claim_Submission_Manual.pdf

APPENDIX F: Weatherization Monitoring Form

Can be found online at <http://www.in.gov/myihcda/weatherization.htm>

APPENDIX G: Furnace Installation Inspection



New Furnace Installation Inspection Form

Revised August 2011

Job Information

Client name: _____	Client number: _____
Address: _____	Phone: _____
Installing contractor: _____	Install date: _____
Address: _____	Phone: _____
Inspected by: _____	Inspection date: _____
Home type: Site built home _____ Mobile home _____ Manufactured home _____ Multi family _____	
Furnace or CAZ location: _____	

Equipment Information

Furnace make: _____ Model number: _____ Serial number: _____	
Furnace Type: 80% _____ 90% _____ Electric _____ Heat pump _____ Oil _____ Space heater _____ Other _____	
Fuel type: Natural gas _____ Propane/LP _____ Oil _____ Electric _____ Furnace airflow: Up _____ Down _____ Horizontal _____	
Furnace input: _____ btuh Oil nozzle: _____ gph Min/max temp rise: _____ deg. F. to _____ deg. F.	
Water heater: Gas _____ Electric _____ Btuh _____ If gas, is it common vented with furnace? Yes _____ No _____	
A/C or Heat pump make: _____ Model number: _____ Serial number: _____	
If system has existing A/C, is it operational? Yes _____ NO _____	
Have equipment installation and/or operational manuals been read and instructions followed? Yes _____ No _____	

Section 1

Venting

<i>Please circle Y for Yes, N for No or NA for Not applicable</i>					
80% and Natural Draft Appliances					
a) Is masonry chimney on an exterior wall? (one or more sides exposed)	<table border="1" style="border-collapse: collapse;"> <tr> <th style="padding: 2px;">Installer</th> <th style="padding: 2px;">Inspection</th> </tr> <tr> <td style="text-align: center;">Y N NA</td> <td style="text-align: center;">Y N NA</td> </tr> </table>	Installer	Inspection	Y N NA	Y N NA
Installer	Inspection				
Y N NA	Y N NA				
b) Is clay liner missing or cracked or misaligned?	<table border="1" style="border-collapse: collapse;"> <tr> <td style="text-align: center;">Y N NA</td> <td style="text-align: center;">Y N NA</td> </tr> </table>	Y N NA	Y N NA		
Y N NA	Y N NA				
c) Is clay liner too large? (exceeds the 7 times rule in NFPA 54, cannot be more than 7 times the area of the smallest draft hood outlet or connector)	<table border="1" style="border-collapse: collapse;"> <tr> <td style="text-align: center;">Y N NA</td> <td style="text-align: center;">Y N NA</td> </tr> </table>	Y N NA	Y N NA		
Y N NA	Y N NA				
d) Is there a draft induced, mid-efficiency appliance vented into masonry chimney alone?	<table border="1" style="border-collapse: collapse;"> <tr> <td style="text-align: center;">Y N NA</td> <td style="text-align: center;">Y N NA</td> </tr> </table>	Y N NA	Y N NA		
Y N NA	Y N NA				
<p>If "Yes" is checked for any of the questions above, the masonry chimney must be lined with an approved chimney liner or type B gas vent.</p> <p>Oil furnaces require class A vent or type L vent pipe and must comply with NFPA 31 venting requirements</p>					

Venting (continued)

	Installer	Inspection
e) Has the chimney been re-lined with type B vent or metal chimney liner?	Y N NA	Y N NA
f) Has the top wash and bottom penetration been sealed to prevent corrosion?	Y N NA	Y N NA
g) Does the vent system have a proper vent cap?	Y N NA	Y N NA
h) Is the single wall vent connector the proper gauge? (26 ga. for gas and 24 ga. for oil)	Y N NA	Y N NA
i) Are the single wall connectors properly screwed together? (3 screws each joint)	Y N NA	Y N NA
j) Do the vent connectors have the proper slope upwards? (minimum 1/4 inch per foot)	Y N NA	Y N NA
k) Are the appliance vent connectors and vent pipes supported properly?	Y N NA	Y N NA
l) Are the B vents supported properly at penetrations through the floors and ceilings?	Y N NA	Y N NA
m) Have clearances to combustibles been met? single wall gas= 6", oil= 9", B-vent= 1"	Y N NA	Y N NA
n) If the water heater has been "orphaned", has a vent liner been installed in chimney?	Y N NA	Y N NA

Venting 90% Direct Vent Appliances

	Installer	Inspection
o) Are both pipes piped to outdoors?	Y N NA	Y N NA
p) Does vent pipe slope back toward furnace for proper condensate return?	Y N NA	Y N NA
q) Are pipes properly supported? (hanger every 4 feet)	Y N NA	Y N NA
r) Is condensate properly disposed of? (piped to open site drain or condensate pump)	Y N NA	Y N NA
s) Is condensate pump safety switch wired to furnace to prevent water damage?(optional)	Y N NA	Y N NA
t) Are the pipes properly terminated? (must conform to manufacturers instructions)	Y N NA	Y N NA

Briefly describe the furnace and water heater vent systems): _____
 furnace connector: _____
 water heater connector: _____
 common vent: _____

Section 2

Ventilation and Combustion Air

a) What is the total BTUH input of open combustion appliances in the Combustion appliance zone?
 (80%, natural draft or one pipe condensing appliances only. Direct vent 2 pipe furnaces do not apply.)
 Installer: _____btuh Inspector: _____btuh

b) What is the combustion appliance zone? (basement, utility room, attic, crawl,...etc.)
 Installer: _____ Inspector: _____

c) What is the volume of air available that communicates with the combustion appliance zone?
 (length X height X width of CAZ or what communicates with CAZ through louvered doors or transfer grilles)
 Installer: _____cu.ft. Inspector: _____cu.ft.

d) What is the volume of air needed for open combustion appliances?
 (to determine divide input from line a by 20 for natural draft or multiply by .0375 for induced draft appliances)
 Installer: _____cu.ft. Inspector: _____cu.ft.

If volume of line d is greater than line c, there is not adequate combustion air and the CAZ is considered a confined space. Describe what was done to address this issue including how combustion and ventilation air is being introduced to the area and the sizes of the pipes and/or grilles.

Section 3

Filter Arrangement

	Installer	Inspection
a) Is the furnace equipped with a new filter? (filter size, _____ X _____ X _____)	Y N NA	Y N NA
b) Is the filter in a user friendly location? (not inside furnace cabinet if possible)	Y N NA	Y N NA
c) Was the client educated on care and maintenance?	Y N NA	Y N NA
d) Is there any return leakage in the furnace area? (open filter door, bottom of furnace)	Y N NA	Y N NA

Section 4

Gas Piping

	Installer	Inspection
a) Is natural gas piped with black iron, galvanized or stainless steel?	Y N NA	Y N NA
b) Is LP gas piped with black iron, galvanized, stainless steel or copper?	Y N NA	Y N NA
c) Does the gas furnace have black iron from gas control valve to outside the cabinet?	Y N NA	Y N NA
d) Is there a sediment trap installed near the furnace?	Y N NA	Y N NA
e) Is there a user friendly manual gas shut-off installed outside the furnace?	Y N NA	Y N NA
f) Is there a union installed between the shut-off and the furnace?	Y N NA	Y N NA
g) Is the gas piping properly sized?	Y N NA	Y N NA
h) Is the gas piping supported properly? (hanger every four feet)	Y N NA	Y N NA
i) Has all gas pipe been leak checked and leak free?	Y N NA	Y N NA

Section 5

Oil Piping

	Installer	Inspection
a) Is oil piped in black iron, brass, galvanized or copper and free of kinks?	Y N NA	Y N NA
b) Is oil line free of compression fittings? (pipe thread or flare fitting only)	Y N NA	Y N NA
c) Is a manual user friendly shut-off installed?	Y N NA	Y N NA
d) Is there at least one oil filter installed in oil supply line?	Y N NA	Y N NA

Section 6

High Voltage

	Installer	Inspection
a) Is the furnace equipped with a switch at the furnace?	Y N NA	Y N NA
b) Is the switch installed in an easily reached, usable location for the client?	Y N NA	Y N NA
c) Is the furnace properly grounded? (120V read from hot to ground wire when unhooked)	Y N NA	Y N NA
d) Is the wire in flexible or rigid conduit from ceiling to floor and away from vent pipes?	Y N NA	Y N NA
e) Is the furnace on its own dedicated circuit breaker?	Y N NA	Y N NA
Optional SSU (fused switch) considerations.		
f) Is the switch equipped with the proper fuse? (15 amp for gas and 20 amp for oil max)	Y N NA	Y N NA
g) Is the polarity correct to the SSU? (power to the switch first, not fuse first)	Y N NA	Y N NA

Section 7

Low Voltage

	Installer	Inspection
a) Is the thermostat level and hole sealed behind the sub-base?	Y N NA	Y N NA
b) Is the thermostat location functional (not on outside wall, near heat source or sunlight)	Y N NA	Y N NA
c) Is the cycle rate or anticipator set properly? (refer to manufacturers instructions)	Y N NA	Y N NA
	N/A	amps amps

Section 8

Worst Case Draft Testing

New appliances are to be tested under " Worst Case Depressurization" conditions even if previously done.

New forced air systems may cause problems that were not an issue with original system.

Part1

Worst Case Set-up

	Installer	Inspection
a) Are the combustion appliances turned off or to pilot?	Y N NA	Y N NA
b) Are all exterior doors and windows closed?	Y N NA	Y N NA
c) Interior Door Position		
Fan off: Close doors except to rooms with exhaust appliances	Y N NA	Y N NA
Fan on: Smoke doors with exhaust appliances and position accordingly	Y N NA	Y N NA
d) Are all fireplace and wood stove dampers closed?	Y N NA	Y N NA
e) Are all exhaust fans on including clothes dryer? (except whole house fan)	Y N NA	Y N NA
f) If house has working fireplace, is blower door set-up for 300 cfm to simulate fire?	Y N NA	Y N NA
g) Is furnace filter clean or removed from furnace?	Y N NA	Y N NA
h) Is pressure gauge set-up to read CAZ pressure with reference to outside?	Y N NA	Y N NA

Part 2

Determine Worst Case Configuration

		Installer	Inspection
i) Is there a door between the CAZ and the rest of the structure?		Yes / No	Yes / No
j) Is there a blower on the heating system?		Yes / No	Yes / No
To determine, test CAZ pressure under, up to, four different configurations.			
Installer		Final Inspection	
CAZ Door:		CAZ Door:	
Open	Closed	Open	Closed
Fan Off - _____ Pa/"wc - _____ Pa/"wc	Fan Off - _____ Pa/"wc - _____ Pa/"wc	Fan Off - _____ Pa/"wc - _____ Pa/"wc	Fan Off - _____ Pa/"wc - _____ Pa/"wc
Fan On - _____ Pa/"wc - _____ Pa/"wc	Fan On - _____ Pa/"wc - _____ Pa/"wc	Fan On - _____ Pa/"wc - _____ Pa/"wc	Fan On - _____ Pa/"wc - _____ Pa/"wc

Part 3

Appliance Testing

After determining "worst case", leave the structure in that configuration.
While monitoring ambient carbon monoxide levels for personal safety
perform draft tests, starting with lowest BTUH rated input appliance.

		Installer	Inspection
Does the smallest appliance establish flow in the vent within 5 seconds?		Y N NA	Y N NA
Does the smallest appliance stop spillage within 2 minutes?		Y N NA	Y N NA
Document the 5 minute draft reading.		Pa	Pa
		"wc	"wc
Record outdoor ambient temperature.		deg.F	deg.F
Does the vent draft pressure meet the requirements with regard to outside temperature?		Y N NA	Y N NA
Record the CO level under both sides of the draft hood after 5 minutes of operation.		ppm	ppm

		Installer	Inspection
Does the larger appliance establish flow in the vent within 5 seconds?		Y N NA	Y N NA
Does the larger appliance stop spillage within 2 minutes?		Y N NA	Y N NA
Retest smaller appliance for spillage and draft once larger appliance passes spillage test		Pa	Pa
Document the 5 minute draft reading.		Pa	Pa
		"wc	"wc
		"wc	"wc
Does the vent draft pressure meet the requirements with regard to outside temperature?		Y N NA	Y N NA
Record the CO level under the draft hood after 5 minutes of operation.		ppm	ppm
Record the efficiency of the furnace as calculated or read from analyzer. (optional)		%	%
Did the larger appliance cause spillage or reduction in draft of smallest appliance?		Y N NA	Y N NA

Section 9

Equipment Operation

		Installer	Inspection
a) Is the temperature rise across furnace within manufacturer specifications?		Y N NA	Y N NA
Installer	Supply air temperature: _____deg.F.	Inspector	Supply air temperature: _____deg.F.
	Return air temperature: _____deg.F.		Return air temperature: _____deg.F.
	Temperature difference: _____deg.F.		Temperature difference: _____deg.F.
b) Is the blower off temperature adjusted to 90° F., or 20° F above return air temperature on furnaces with blower off delay controlled by time.		Y N NA	Y N NA
c) Does the furnace input rate within 5% of rating plate without going over?		Y N NA	Y N NA
Dial used: _____cu.ft. Seconds for 4 revolutions _____ seconds Equals _____cu.ft.(chart is on page 6)			
cu.ft. total _____ X _____btuh per cu.ft. Equals _____ Btuh Input			
d) Does limit trip when blower is disabled or starved?		Y N NA	Y N NA
(check temperature in plenum above furnace and record when limit trips)		deg.F.	deg.F.

Section 10

OIL Furnace Combustion Efficiency Data

		Installer	Inspection
a) Is there an operational barometric damper? (not required for mobile home)		Y N NA	Y N NA
b) Over fire draft: _____ " w.c.or pa b) Gross stack temp.: _____deg.f. c) Room temperature: _____deg.f.			
e) Net stack temp.: _____deg.f. f) Percent of O2 at steady state: _____% g) Efficiency at S.S.: _____%			
f) Smoke number: _____ g) Vent draft: _____ " w.c. or pa			

Section 11

Mobile Home Considerations

		Installer	Inspection
a) Is the furnace installed with a factory authorized non-combustible floor base?		Y N NA	Y N NA
b) Is the furnace installed with a factory authorized roof-jack?		Y N NA	Y N NA
c) Is the furnace installed in a closet as a result of a former belly return system?		Y N NA	Y N NA
d) If yes to question c, has the proper grille or louvered door been installed for return air?		Y N NA	Y N NA
e) Have supply ducts been sealed at both ends and repairs completed?		Y N NA	Y N NA

Section 12

Physical Installation Considerations

		Installer	Inspection
a) Has proper furnace clearance been met? (30" in front for service)		Y N NA	Y N NA
b) Has entire opening been cutout on side return of up flow furnace?		Y N NA	Y N NA
c) Is bottom in place and sealed on up flow furnace with side return?		Y N NA	Y N NA
d) Has humidifier been removed and the ductwork openings covered and sealed?		Y N NA	Y N NA
e) Has all printed material with furnace been left in a secure place near the furnace?		Y N NA	Y N NA

Section 13

Existing A/C Considerations

*** Do not operate A/C if outdoor temperature is below 70° F ***		Installer	Inspection
a) Has existing a/c coil been cleaned and drain pan condition checked?		Y N NA	Y N NA
b) Is condensate drain piped to outside or open site drain? (not dumping into crawl or piped into sewer drain without air break and trap)		Y N NA	Y N NA
c) Has blower fan speed been set to match airflow requirements of the A/C		Y N NA	Y N NA
d) Has the A/C been checked for proper operation and temperature drop across coil?		Y N NA	Y N NA
Return air at furnace: _____deg Supply air after a/c coil: _____deg Temperature difference: _____deg			
(Proper drop across coil should be between 16 and 22 degrees)			

Meter Dial Used					
Seconds for one revolution	One half Cu. Ft.	One Cu. Ft.	Two Cu. Ft.	Five Cu. Ft.	Ten Cu. Ft.
Cubic Feet Per Hour					
10	180	360	720	1800	3600
11	164	327	655	1634	3272
12	150	300	600	1500	3000
13	138	277	555	1385	2770
14	129	257	514	1286	2572
15	120	240	480	1200	2400
16	112	225	450	1125	2250
17	106	212	424	1059	2118
18	100	200	400	1000	2000
19	95	189	379	947	1894
20	90	180	360	900	1800
21	86	171	343	857	1714
22	82	164	327	816	1636
23	78	157	313	783	1566
24	75	150	300	750	1500
25	72	144	288	720	1440
26	69	138	277	692	1384
27	67	133	267	667	1334
28	64	129	257	643	1286
29	62	124	246	621	1242
30	60	120	240	600	1200
31	58	116	232	580	1162
32	56	113	225	563	1126
33	55	109	218	545	1090
34	53	106	212	529	1058
35	51	103	206	514	1028
36	50	100	200	500	1000
37	49	97	195	486	972
38	47	95	189	474	948
39	46	92	185	462	924
40	45	90	180	450	900
41	44	88	176	440	880
42	43	86	172	430	860
43	42	84	167	420	840
44	41	82	164	410	820
45	40	80	160	400	800
46	39	78	157	391	782
47	38	77	153	383	766
48	37	75	150	375	750
49	37	73	147	367	734

Meter Dial Used					
Seconds for one revolution	One half Cu. Ft.	One Cu. Ft.	Two Cu. Ft.	Five Cu. Ft.	Ten Cu. Ft.
Cubic Feet Per Hour					
50	36	72	144	360	720
51	35	71	141	353	706
52	35	69	138	346	692
53	34	68	136	340	680
54	33	67	133	333	666
55	33	65	131	327	654
56	32	64	129	321	642
57	32	63	126	316	632
58	31	62	124	310	620
59	30	61	122	305	610
60	30	60	120	300	600
62	29	58	116	290	580
64	29	56	112	281	562
66	28	54	108	273	546
68	28	53	106	265	530
70	26	51	103	257	514
72	25	50	100	250	500
74	24	48	97	243	486
76	24	47	95	237	474
78	23	46	92	231	462
80	22	45	90	225	450
82	22	44	88	220	440
84	21	43	86	214	428
86	21	42	84	209	418
88	20	41	82	205	410
90	20	40	80	200	400
94	19	38	76	192	384
98	18	37	74	184	368
100	18	36	72	180	360
104	17	35	69	173	346
108	17	33	67	167	334
112	16	32	64	161	322
116	15	31	62	155	310
120	15	30	60	150	300
130	14	28	55	138	276
140	13	26	51	129	258
150	12	24	48	120	240
160	11	22	45	113	226
170	11	21	42	106	212
180	10	20	40	100	200

Minimum Draft Pressure Requirements

Outdoor Temperature	Inches of water column	Pascals
Greater than 80 degrees F.	Negative 0.005" w.c.	Negative 1 Pa
Between 60 and 80 degrees F.	Negative 0.008" w.c.	Negative 2 Pa
Between 40 and 60 degrees F.	Negative 0.012" w.c.	Negative 3 Pa
Between 20 and 40 degrees F.	Negative 0.016" w.c.	Negative 4 Pa
Less than 20 degrees F.	Negative 0.02" w.c.	Negative 5 Pa

APPENDIX H: Client Consent

CLIENT CONSENT FORM

RELEASE OF LIABILITY AND WAIVER OF CLAIMS

NOTICE: The health and safety of the building, the occupants, or the weatherization staff shall not be compromised by any retrofit material, technique or practice. To ensure health and safety, relevant assessments will be conducted as part of all building analysis. Some weatherization activities may create dust or other airborne particles, including but not limited to: insulation, mold, or lead. All measures installed in the building will alleviate and/or not promote the growth of new airborne particles.

FOR AND IN CONSIDERATION of the State of Indiana, the Indiana Housing and Community Development Authority, and _____ hereafter referred to as Weatherization Administrator its agents and employees assisting in the provision of weatherization services to our dwelling, I/WE DO HEREBY RELEASE the State of Indiana, the Indiana Housing and Community Development Authority, and the Weatherization Administrator its agents or employees from any and all liability for losses, damages, costs, personal injury, death, or other claims because of, or in relation to the installation, location, or malfunction of measures performed.

I understand that by participating in the Indiana Weatherization Assistance Program (WAP) measures performed become my personal property and it is my responsibility to maintain and repair installed measures to keep the building systems in working condition.

Please initial where applicable:

I have received a copy of the EPA pamphlet, "Renovate Right: Important Lead Hazard Information for Families, Child Care Providers and Schools", informing me of the potential risk of lead hazard exposure from WAP activities to be performed on my dwelling. I confirm that I have received the lead pamphlet before weatherization work began on my home.

_____ I have received a copy of the EPA pamphlet, "Mold, Moisture, and Your Home", informing me of the potential risks of mold and high moisture levels in my home. I have also received a copy of the moisture assessment form that was completed on my home.

_____ I understand that smoke and/or carbon monoxide alarms installed in my home are my personal property and must be maintained in order to continue good working conditions. An operational test was performed and the unit(s) were working properly when installed.

My signature below denotes that I fully understand the above waiver and its release of liability. I have chosen to go forward with the weatherization process, accepting any and all risks of injury or damages. I also agree to allow for inspection of materials and services for a period of one (1) year following installation.

Printed Name

Signature

Date

APPENDIX H-1

FORMULARIO DE CONSENTIMIENTO DEL CLIENTE

EXENCIÓN DE RESPONSABILIDAD Y RENUNCIA A EFECTUAR RECLAMACIONES

AVISO: la salubridad y seguridad de la edificación, de sus ocupantes, o del personal para la climatización no se verán comprometidas por causa de cualquier material, técnica o práctica de acondicionamiento. Para asegurar la salubridad y seguridad, se llevarán a cabo evaluaciones relevantes como parte de la totalidad del análisis de la edificación. Algunas actividades del proceso de climatización podrían crear polvo u otras partículas que ingresarán al aire, incluyendo a título informativo más no limitativo: aislante, moho o plomo. Todas las medidas que se han instalado en la edificación contribuirán a aliviar y/o a evitar el desarrollo de nuevas partículas presentes en el aire.

PARA Y EN CONSIDERACIÓN del Estado de Indiana, Indiana Housing and Community Development Authority, y _____ en lo adelante identificado como Administrador de la Climatización, sus agentes y empleados que trabajan para proporcionar servicios de climatización a nuestra edificación, YO/NOSOTROS POR LA PRESENTE EXIMO/EXIMIMOS al Estado de Indiana, a Indiana Housing and Community Development Authority y al Administrador de la Climatización, sus agentes o empleados de cualquier responsabilidad por pérdidas, daños, costos, lesiones personales, muerte u otros reclamos que pudieren ocasionarse por la instalación, ubicación o resultado inadecuado de las medidas ejecutadas o relacionadas con ellas.

Comprendo que al participar en el Programa de Asistencia para la Climatización de Indiana (WAP, por sus siglas en inglés) las medidas correctivas que se pongan en práctica se convierten en mi propiedad personal y que es mi responsabilidad mantener y reparar las modificaciones instaladas para conservar los sistemas del edificio funcionando en buenas condiciones.

Coloque sus iniciales donde sea pertinente:

- _____ He recibido una copia del panfleto EPA, “Remodelar correctamente: información importante sobre los riesgos causados por el plomo para las familias, los proveedores de cuidado infantil y escuelas”, informándome sobre el riesgo potencial de la exposición al plomo que ocasionan las actividades de WAP en la edificación. Confirmando que he recibido el panfleto sobre el plomo antes del inicio de los trabajos de climatización en mi vivienda.
- _____ He recibido una copia del panfleto de EPA, “Moho, humedad y su hogar”, el cual me informa sobre los riesgos potenciales del moho y de los altos niveles de humedad en mi hogar. También he recibido una copia del formulario de la evaluación sobre humedad que se efectuó en mi vivienda.
- _____ Comprendo que los detectores de humo y/o monóxido de carbono instalados en mi vivienda son de mi propiedad personal y deberán mantenerse en buenas condiciones para que continúen prestando el servicio. Se efectuó una prueba operativa y la(s) unidad(es) estaba(n) trabajando adecuadamente cuando se instalaron.

Mi firma al pie denota que comprendo completamente la cláusula de renuncia anteriormente indicada y su exención de responsabilidad correspondiente. He elegido continuar con el proceso de climatización, y acepto todos los riesgos de lesiones o daños. También acepto permitir la inspección de materiales y servicios durante el período de un (1) año siguiente

a la instalación.

Nombre en letra de molde

Firma

Fecha

APPENDIX I: Mobile Home Work Order

APPENDIX I: Site Built Work Order

Can be found online Field Guide SWS-Aligned Edition at <http://wxfieldguide.com/in/>

APPENDIX J: Stove/Oven Information

Gas Cook Stove and Oven Information

Name: Job #

Make and Model:

Serial # and Condition of Appliance:

LP gas _____ Natural gas _____ Gas Leaks? Yes / No Repaired? Yes / No

Range Top Level? Yes / No Range Top left In Level Condition Yes / No

Brass Flex Connector? Yes / No Condition? Replaced? Yes / No

Exhaust Fan? Yes / No Vented to outside? Yes / No Does it Work? Yes / No

PPM Carbon Monoxide Pre: Inspector: Date: _____

Ambient CO Level - Pre: _____ Post: _____

Left Rear Burner: _____ Right Rear Burner: _____

Left Front Burner: _____ Right Front Burner: _____

Oven Burner: _____

PPM Carbon Monoxide Post: Technician: Date: _____

Left Rear Burner: _____ Right Rear Burner: _____

Left Front Burner: _____ Right Front Burner: _____

Oven Burner: _____

PPM Carbon Monoxide Inspection: Inspector: Date: _____

Left Rear Burner: _____ Right Rear Burner: _____

Left Front Burner: _____ Right Front Burner: _____

Oven Burner: _____

Comments / Repairs: _____

Cook Stove and Oven Protocol

- Is the appliance safe to operate? Check for gas leaks. Check the condition of the flex connector. Repair any gas leaks and replace the flex connector if it is badly kinked, in poor condition or a brass connector manufactured before 1974. The appliance shall have a user-friendly gas shut off valve on the inlet side of the flex connector.
- ☐ Does the appliance area have an operating exhaust fan that vents to the exterior of the building? Inoperable fans that vent to the outside should be repaired. All fans should be vented to the outside if possible. Mobile homes should have an exhaust fan that vents to the outside. The fan should be switched on and left operating for the duration of the test.
- ☐ Make sure you are not breathing excessive amounts of carbon monoxide while the testing is being performed. Clear your CO instrument outside in a clean environment and document pre-testing ambient levels around the appliance. Be aware that ambient levels can change as you test. Document post-testing CO ambient levels. For worker safety, cease testing and investigate repairs if ambient CO levels exceed 35 PPM.
- ☐ Operate each range top burner on high setting. Check carbon monoxide levels 6 to 8 inches above the flame on each burner after 2 minutes of operation. The acceptable level of carbon monoxide is less than 30 PPM above the ambient level. Burners found to be making in excess of 30 PPM above the ambient level shall be cleaned or repaired.
- ☐ Remove any blockage of the air inlet holes in the oven such as aluminum foil covering the oven bottom. Close the oven and broiler drawer doors. Set the oven on broil so it runs for the duration of the test. Carbon monoxide levels should be checked at the oven exhaust port after 5 minutes or when the reading stabilizes. There will be an initial spike in the reading as the oven warms up. If the oven has a top and a bottom burner, then two readings need to be obtained. One reading with the bake/bottom burner on and the other reading with the broil/top burner on. The acceptable level of carbon monoxide for the oven is less than 150 PPM above the ambient level. Ovens found to be making in excess of 150 PPM above the ambient level shall be cleaned or repaired.
- ☐ Make sure the range top is level front to back and side to side before leaving. Any information regarding the appliance condition, operation or repairs should be noted in the comments/repair section of the information page. Educate the homeowner. The exhaust fan should be operating when the stove or oven is on. Point out the need to keep the air inlet openings in the oven free from obstruction. A dirty appliance may contribute to carbon monoxide production.

APPENDIX K: Gas Appliance Form

Can be found online <http://intelligentweatherization.org/weatherization-forms/> or within Chapter 13 of the Field Guide SWS-Aligned Edition at <http://www.in.gov/myihcda/2401.htm>

Indiana WX Gas Appliance Inspection Procedure

1) Gas Appliance Inspection Responsibilities

- The gas appliance inspection and associated tasks must be completed by qualified auditors or heating technicians, with internal furnace work performed by qualified heating technicians.
- The auditor and tech columns are both for the initial inspection. Both columns are not required to be filled out. Each task must be acknowledged in either the auditor or the tech column.
- The interim column is only completed to verify repairs or requested changes.
- The interim column must be completed by a qualified technician or auditor.
- Repairs or furnace replacement must be inspected and signed off before air sealing and insulating.
- Health and safety repairs should be listed on the last page of the form.

2) Client Interview:

This is important because it gives the inspector an idea of how the appliances are operating, lets the client know what you will be doing and gets the client involved which helps make client education easier.

- Let the client know that access will be needed to the entire house.
- Ask if the appliances currently operate.
- Ask if there are any problems with the system.
- Ask if there are any uncomfortable areas of the home.
- Would the addition of a supply run benefit an area of the house heated by a supplemental heat source? (An example would be a kitchen with no supply run and is being heated with the cook stove.)
- Ask the client if there are any resident illnesses.
- Ask if the client sets back the thermostat.
- Find out when would be a good time to discuss client education issues.
- Document any problems or pertinent information in the "Comments" section of the inspection form.

3) Initial Health and Safety Inspection:

This is important to ensure we have a safe working environment before we start the inspection process.

- Measure ambient carbon monoxide levels

- Look for fire hazards such as flammable products in the combustion appliance zone
- Inspect for mold or moisture issues
- If gas odor is detected, use electronic gas leak detector to search for major leak

4) Equipment Information:

Determine fuel type, whether the heating system is a forced air, and types of appliances. List furnace Make, Model and Serial numbers, inputs and locations. For more than one furnace or WH, document appropriate information in the "comments" section.

5) New Furnace installations:

If the final inspection is of a job with a new furnace installation then only the CAZ Depressurization, Combustion Safety and Temp Rise sections need to be completed.

Other appropriate information will be entered on the New Furnace Installation Inspection form.

6) Gas Leaks and Piping Problems:

Gas piping is checked at the beginning of the inspection process to ensure inspector and client safety before the appliances are run for testing. The inspection process is stopped if a hazardous leak is found. A hazardous leak is one that can be easily smelled or sets off the alarm on a calibrated electronic gas leak detector. Hazardous leaks are repaired before the inspection process can resume. Non-hazardous leaks can be repaired at a later date.

- Test ALL gas piping in the home for leaks using aU-tube manometer or another pressure testing procedure, or an electronic leak detector and/or soap bubbles.
- No leaks allowed.
- Brass flex connectors manufactured in 1973 or earlier are to be replaced.
- Only AGA approved materials should be used in the gas piping system. These include but are not limited to piping, fittings, and valves and flex connectors.
- Inspect to make sure that flex connectors or soft copper tubing do not extend through a knockout hole in the furnace cabinet without appropriate protection.
- Make sure that flex connectors are entirely in the same room as the appliance it serves and there is a shut-off valve on the inlet of the connector and only one flex connector is used per appliance.
- Make sure that flex connectors used outdoors are rated for such use.
- Inspect for proper materials. Black iron pipe or CSST must be used as piping for natural gas systems.
- CSST (Corrugated Stainless Steel Tubing) must be grounded to the electrical service electrode grounding system at the point where the gas piping enters the building- the bonding jumper must be no smaller than 6 AWG copper or equivalent.
- Black iron pipe, CSST, galvanized pipe or copper tubing can be used on L.P. systems.

- Check to make sure the appliance shut off valve is user friendly and operable.
- Install missing sediment traps if the piping system will be altered in any way.
- Make sure gas piping is properly supported.
- Compression fittings are not allowed on any fuel line.
- Inspect the gas piping system for any potential hazards.
- Understand pressure testing may be required to perform leak testing on inaccessible piping.

7) Electrical Safety:

The electrical system is checked at the beginning of the inspection process to ensure inspector and client safety before the appliances are run for testing or cleaning.

- Inspect to make sure the appliance has an operational shut-off switch in a usable location.
- If the appliance has a fused switch, make sure the fuse is of the appropriate amperage rating. Fuse size should be no larger than the size of the breaker or fuse feeding the furnace branch circuit. Revised 1/2015 Indiana Weatherization Gas Appliance Inspection Guide
- If the appliance has a fused switch, make sure the line/load designations are followed so the fuse is not "live" when being replaced by the client.
- Determine the polarity of the electrical supply and repair if necessary. Proper direction of current flow can be easily tested with a non-contact voltage tester.
- Make sure the appliance is properly grounded. This starts with a visual inspection to see if a ground wire has been run to the furnace. The ground must be tested to make sure it is connected at the electrical service panel. A proper ground must be provided if one does not exist.
- Repair any electrical safety problems.

8) Heat exchanger:

Don't waste time doing more work than necessary on a bad furnace. A determination of the integrity of the heat exchanger needs to be made at this point in the process. Removal of the burners and blower assembly for inspection and cleaning often provides an opportunity to inspect the heat exchanger from the inside and outside. On condensing furnaces it may be necessary to remove the air conditioning coil or open the plenum to view the entire heat exchanger.

- Inspect the heat exchanger for holes or cracks visually or by any of a number of heat exchanger testing methods.
- A combustion analyzer may be useful for testing for heat exchanger integrity by monitoring oxygen changes during blower operation on non-condensing furnaces.
- On condensing furnaces, block the furnace vent outlet, turn blower on, check for pressure on the heat exchanger pressure switch tube or smoke the inlets at the burners. Pressure in the tube or smoke blowing back from inlets may indicate a hole

in the heat exchanger.

- If the furnace is found to be beyond repair and is to be replaced, the technician must continue the inspection process and complete all other appropriate sections of the Inspection form.
- Clean the interior of the heat exchanger as necessary.
- Check the heat exchanger secondary coil and clean as necessary.

Burners:

- Remove and clean as required. Burners should be cleaned both inside and outside.
- Water is a good cleaning tool.
- Check for proper burner alignment
- Clean orifices as necessary.
- Remove and clean pilot assembly as necessary
- Clean flame sensor
- Adjust burner primary air openings as necessary.

Direct or Belt Drive Blowers:

- Disassemble the assembly and clean the blower wheel.
- Clean the blower housing.
- Brushes are typically insufficient for proper cleaning. Water and cleaners are recommended.
- Clean the air-cooled motor. A vacuum w/brushes and electrical motor cleaner are recommended.
- Oil the motor if required.
- Inspect and replace worn belts.
- Inspect the pulley alignment and adjust if required.

Air conditioning:

- Clean the indoor air conditioning coil as necessary Revised 1/2015 Indiana Weatherization Gas Appliance Inspection Guide
- While the blower is removed may be a good time for a visual inspection of the coil.
- Inspect condensate pan and drain piping- make necessary repairs.

Note: The clean and tune process is very much a preventative maintenance procedure. The burners and blower assemblies on almost every furnace should be pulled and cleaned. This may be the only clean and tune this furnace will ever see. With good client education, the goal is to keep the appliances running properly long after you are gone

9) Vent system:

The vent system must be inspected before the appliances are operated for testing. A vent system installed to the minimum NFP A 54 venting guidelines is required to achieve as proper and predictable vent operation as possible. Venting problems, which would allow combustion by-products to enter the structure during appliance operation, must be repaired before testing can begin.

A vent system that is, at a minimum, installed to code is an important part of the Weatherization process. From a quality control perspective, a description of the final vent system gives Agency reviewers and Monitors a good idea of what was done at the home.

- Inspection of the entire vent system, including attics, chases ... etc., is required.
- Make sure the vent system is free of obstructions.
- Inspect for chimney damage, corroded vents or connectors, gaps or sections of missing pipe.
- Make sure the chimney has a proper clean-out cover and that any unused holes have been repaired.
- Make sure the chimney or vent has a proper cap or appropriate bird screen.
- Inspect the termination for proper height and location or obstructions.
- Make sure the vent system has proper support and is screwed together.
- Inspect for proper clearances to combustibles.
- Inspect for proper gauge of pipe for the vent connectors.
- Check for proper size of the vent and vent connectors.
- Make sure the vent and vent connectors have proper upward slope to the exterior of the structure.
- Remove thermally operated vent dampers and replace with the appropriate pipe.
- Reasons for relining existing masonry chimneys with a new listed chimney lining system:
 - Bad chimney- Not Class A- deteriorated- plain brick and mortar chimney
 - Too large - violates the 7X rule - this pertains to "orphaned" water heaters
 - Insufficient draft
 - Exterior chimney with a new appliance installation
 - Mid-efficiency 80% furnace by itself, regardless of the configuration
- Condensing furnace vent systems must be installed per Manufacturers Installation Instructions.
- Condensing furnaces must obtain combustion air from outside if the unit is designed for direct vent ("two-pipe") installation.
- Inspect for proper outside termination of plastic vent pipes.
- Inspect for proper slope of plastic vent pipe back to furnace for proper drainage of condensate.
- Inspect for proper condensate disposal system, clean if necessary. Revised 1/2015 Indiana Weatherization Gas Appliance Inspection Guide

10) Combustion and Ventilation Air:

All combustion appliance zones are to be evaluated to determine whether proper combustion and ventilation air is available. If the volume or air leakage rate of the CAZ is determined to be insufficient, then combustion and ventilation air requirements are to be met per NFP A 54 or the IFGC.

- Follow the form procedure to determine the adequacy of the space to meet combustion and ventilation air requirements
- To use interior air for combustion and ventilation, the estimated natural air infiltration rate of the building must be no less than .4 ACH.
- If the volume needed is more than the volume available or the building is too tight, follow the guidance outlined in NFP A 54 or the IFGC.
- Never leave a CAZ without proper combustion and ventilation air.

11) Filter:

During client education, discuss the savings potential of a clean filter and blower. Educate the client on location and maintenance of the filter.

- Replace the existing dirty filter or clean the existing dirty washable filter.
- If possible or appropriate, move the filter to a user friendly location. It is a good idea to put them someplace other than inside the blower housing.
- Add support to filters to prevent them from being sucked into the blower.
- Make sure the opening in the cabinet is larger enough to allow the proper airflow to the blower.
- Inspect to make sure the filter covers the entire opening in the return duct.
- When a remote filter such as a filter grille is used, the entire return system must be tightly sealed all the way back to the furnace casing.
- Make sure exposed filter slot openings have been covered with a removable, marked cover.
- If a high pressure drop filter is used, make sure there is still proper airflow across the unit.

12) Ducts:

Be aware that severe duct problems may cause a hazardous environment for testing the combustion appliances. Take appropriate precautions. CAZ depressurization testing should identify these issues.

- Seal any open returns in the CAZ.
- Supply and return ducts that extend outside the pressure and thermal boundary of the home are to be tightly sealed and insulated.
- Supply and return ducts that are inside the pressure and thermal boundary of the home are to be sealed if there is a

pressure imbalance or air delivery issues.

- Return ducts in crawl spaces should be sealed for indoor air quality.
- Air distribution issues must be addressed- this would be either to provide enough airflow across the furnace for proper operation or to eliminate the use of a supplemental heat source in an area that can be serviced by the furnace.
- When a remote filter such as a filter grille is used, the entire return system must be tightly sealed all the way back to the furnace casing. Revised 1/2015 Indiana Weatherization Gas Appliance Inspection Guide
- After duct sealing, make sure there is sufficient airflow across the furnace heat exchanger to keep the unit operating within temperature rise specifications.
- Leaky supply and return ducts are sealed to address both safety and efficiency.
- Open dampers in supply duct runs.
- Address restrictions in the duct system such as blocked return grilles or crushed supply registers.
- Existing duct-board or flex duct returns that have the potential to be future open returns should be replaced with metal duct- in particular, those that are located in the CAZ.
- Interior rooms are to be pressure relieved if necessary.
- Pressure pan numbers are documented on WX audit paperwork.
- Repair any problems with the duct system.

13) Thermostat:

During client education, discuss the savings potential of setting back the thermostat.

- Make sure the thermostat is level and secure.
- The thermostat location must be functional - away from heat sources, direct sunlight or outside walls.
- The hole behind the thermostat must be sealed to prevent drafts in the wall from affecting the stat.
- Measure the amperage of the control circuit and reset the heat anticipator if necessary.
- Digital thermostats should have the cycle rate set to match the furnace it is controlling. Refer to manufacturer instructions.
- If replacing a mercury based thermostat, remove safely and dispose of in accordance with EPA regulations.

14) Water Heater Initial Check:

In order to be able to fire the water heater for operational testing, it may be necessary to put the water heater on "pilot" and run water to cool the heater. This is a good time to document the hot water temperature.

During client education, discuss the inefficiency and scalding potential of water hotter than 120 ° F If the water temperature has been adjusted down and the client wants it hotter, instruct the client not to turn it back up higher than where you

marked it.

- Mark the temperature dial on the water heater at its current setting with a permanent marker.
- Measure the hot water temperature at the nearest location.
- Make sure that all water heaters have a properly installed pressure and temperature relief valve.
 - T & P must be installed in the water in the top 6" of the tank.
 - The drop must be a material suitable for water distribution. (PVC drain pipe not allowed)
 - Drop extends to within 6" of the floor
 - Cannot extend into a drain - must have an air gap
 - Drop cannot have a valve in the line and cannot terminate with a threaded end
- After draft and CO testing is complete, adjust the water temperature setting to approximately 120 ° Fahrenheit, if necessary.
- Repair or replace leaking water heaters.
- Install expansion tank when code requires (back flow preventer on water system)
- Inspect electric water heaters for safe wiring practices.
- Repair any problems with the electric or gas water heaters.

15) CAZ Depressurization:

Depressurization testing is done to determine the configuration of the CAZ which is least likely to allow vented combustion appliances to establish a flow in the vent and adequately vent combustion by-products to the exterior of the building.

Base Line Test set up:

- a) Turn off the combustion appliances to be tested. Test the appliances with as cool of a vent as possible.
- b) Remove the furnace filter. Forced air systems must be able to move air if there is a depressurization problem to be found.
- c) Close exterior windows, doors and other openings. Be thorough; don't miss something like an attic hatch hidden in a closet.
- d) Close fireplace and wood stove dampers. Leaving these open will pressure relieve the house and affect depressurization testing.
- e) Set-up manometer to measure CAZ pressure with reference to outside.
- f) Record CAZ base line pressure.

Depressurization set-up, blower off:

- g) Operate the clothes dryer and all building exhaust fans.
- Exception: Do not operate whole house fans

- Exhaust fans might be range hoods, down-draft cooking appliances, some microwave ovens, bath fans, radon fans, craft room fans ... etc.
- Operate working PAY's. (Power attic ventilators)
- Clean the dryer lint trap and outlet if dirty. Recommend running the dryer on a "no-heat" setting.

h) Open all the supply registers except any registers located in the CAZ. Closing registers in the CAZ would be "worst case" from a negative pressure perspective.

i) Interior door position: Close all interior room doors except to rooms that contain an exhaust fan or exhaust appliance.

We need to see the effect of the fans in those rooms on the CAZ without the furnace fan operating.

j) Smoke or pressure test any doors that separate stories or sections of the house to determine door position with CAZ at your back. Positive pressure (blows smoke toward you) close door.

Negative pressure (sucks smoke under) open door.

k) If needed, a blower door can be operated to exhaust 300 CFM from the building to simulate the flow of an operable fireplace/ or wood-stove vent. This can also be used to simulate the flow of exhaust fans that may not have been installed or connected yet. Typical flows might be:

- Bath fan - 50 CFM
- Range hood - 100 CFM
- Clothes dryer- 150 CFM
- Whatever CFM is calculated for occupant ventilation

"Worst Case" Depressurization Test, blower off:

a) Document the CAZ pressure WRT outside with the CAZ door to the interior open.

b) Document the CAZ pressure WRT outside with the CAZ door to the interior closed.

Blower on test set-up:

c) Operate furnace blower and test the position of interior doors to rooms that have supplies and also have exhaust fans or returns. With the furnace blower operating, it is necessary to evaluate the door position of the rooms with exhaust fans or returns. From the CAZ side of the door, smoke the doors to rooms with an exhaust fan or exhaust appliance to see the direction of the flow of smoke. If the smoke gets sucked under the door, leave it open. If the smoke blows back at you, close the door. A digital pressure gauge can be used instead of smoke. Also retest <my doors that separate stories or sections of the house to determine door position

"Worst Case" Depressurization Test, blower on:

d) Document the CAZ pressure WRT outside with the CAZ door to the interior closed.

e) Document the CAZ pressure WRT outside with the CAZ door to the interior open.

Determine the worst case depressurization. Adjust it from the baseline reading and record. Compare it to the Appliance Depressurization Limits Table found in the SWS detail 2.0299.1. If negative pressure exceeds the limits for the appliance(s) in the CAZ determine corrective measures.

Appliance(s) Tolerance rating

Atmospheric water heater only -2 pa

Atmospheric water heater with atmospheric furnace -3 pa

Atmospheric or fan assisted furnace or boiler only -5 pa

Oil furnace -5 pa

Closed controlled wood burning appliance -7 pa

Direct vent sealed combustion -15 pa

Important: This set-up procedure does not cover all houses. Understand the concepts and adapt them as needed. Common deviations from the set-up procedure deal with door closure issues. Examples would be having a bathroom with an exhaust fan located in a bedroom or a CAZ in a basement that has a door along with a door at the top of the basement stairs. Anytime there is a door where you are unsure of its position, smoke it with the furnace fan off to get the first two measurements and then smoke it again with the furnace fan on for the second two measurements. Use the smoking guidance under set-up item "g" listed above.

16) Note: Depending on the location and type of appliance, all four pressure measurements may not be necessary.

- Test the appliances under the most negative pressure documented. This would be considered "worst case depressurization" conditions of the CAZ.
- If the technician finds the appliances cannot establish flow in the vent or will not work under "Worst Case" conditions, then continue testing under normal operating conditions and document in the "Health & Safety Issues to be Addressed" or "Comments" section of the guide.
- The final measurements documented in either the Auditor or Technician columns of the Gas Appliance Inspection Form must meet all standards for appliance operation before shell work can begin.

Appliance Firing and Testing Procedure Set up:

a) Drill a test hole at the appropriate location in the vent pipe of the appliances to be tested.

a. Draft hood equipped - as far as possible, keep test hole away from the draft hood or turbulence created at elbows ... etc.- in the longest, straightest pipe is preferred

b. 80% furnaces - away from the draft effect created by the inducer operation –preferably after an elbow from the inducer

c. 90% furnaces - CO can be tested at the outlet of the vent- only drill the pipe at the furnace if the hole can be sealed appropriately with a threaded plastic plug and silicone or located behind a rubber coupling that can be tightened over the test hole.

b) Drill holes in supply and return ducts for temperature testing.

c) Turn on (preferably outside) a digital CO tester. Monitor CO in the ambient air for the entire test.

d) Re-create "worst case depressurization" of the CAZ.

Order of testing:

Test the lowest Btuh input appliance first. (Usually the water heater) This provision applies to all appliances that share combustion air.

17) Water Heater Combustion Safety Test

a) For personal safety, measure CO in the ambient air as all appliances are operated.

b) Fire the water heater.

c) The water heater should be able to initially establish flow in the vent. That is to say, flow has started up the vent (vent is getting warm), and there is not complete back-drafting of the appliance. It should be noted that initial flow can be established while still having minor spillage.

d) There should be no spillage of flue products within two minutes of operation.

e) After 5 minutes, measure for adequate draft in the vent. Adequate draft pressure is:

Outdoor Temperature	Minimum draft inches of WC	Minimum draft Pascals
Greater than 80F	-.005 W.C.	-1 pa
Between 60-80F	-.008 W.C.	-2 pa
Between 40-60F	-.012 W.C.	-3 pa
Between 20-40F	-.16 W.C.	-4 pa
Less than 20F	-.02 W.C.	-5 pa

f) After 5 minutes, measure for carbon monoxide on both sides of the baffle in the undiluted flue products under the draft hood. The acceptable amount of CO is a stable measurement of less than 50 PPM as measured.

- Initial draft pressure measurements of the water heater MUST be taken at steady state efficiency. This way there is a valid number to compare to when retesting. Operate and test the other vented combustion appliances in the CAZ and re-test the water heater draft. The draft pressure should not decrease.

- If an appliance cannot establish initial flow in the vent or still has spillage after two minutes, the appliance should be considered hazardous and should not be operated until repairs are made.

- An appliance not meeting draft or CO standards is to be repaired before WX work is completed.

Note: It is a good idea to have the CO meter between your nose and the draft hood when measuring ambient CO on start-up of an appliance. Think safety. Understand the concept of establishing flow. The unit has to start a flow up the vent or you must abort the test for your own safety. If the unit cannot establish flow, lose the "worst case" conditions and try again. Initial combustion safety testing must be completed. Think of the test as a 5 second, 2 minute, 5-minute test. Leave the

water heater operating when moving on to the furnace - it will need to be retested for spillage and draft after the furnace has been started.

18) Furnace Combustion Safety Test

a) For personal safety, measure CO in the ambient air as all appliances are operated.

b) Fire the heating appliance.

c) The heating appliance should be able to establish flow in the vent. That is to say, flow has started up the vent (vent is getting warm), and there is not complete back-drafting of the appliance. It should be noted that initial flow can be established while still having minor spillage.

d) There should be no spillage of flue products within two minutes of operation.

e) After a draft hood heating appliance flow is established and spillage disappears, retest the smaller appliance for spillage and draft pressure. After an induced draft furnace fires and flue gas is flowing into the vent, immediately retest the smaller appliance for spillage, then draft.

f) After 5 minutes, measure for adequate draft in the vent. Adequate draft pressure was previously listed in the water heater section.

g) After 5 minutes, measure for carbon monoxide in the undiluted flue products at the outlet of the heat exchanger cells or in the vent as applicable. The acceptable amount of carbon monoxide is a stable measurement of less than 50 PPM per cell as measured.

h) After 5 minutes, measure temperature rise across the heat exchanger.

Note: When the blower comes on, check for flame interference if worst case set-up does not call for the blower on.

- Operation of the heating appliance should not cause spillage at the draft hood or a reduction in draft at any other appliance.
- If an appliance cannot establish initial flow or still has spillage after two minutes, the appliance should be considered hazardous and should not be operated until repairs are made.
- An appliance not meeting draft or CO standards is to be repaired before WX work is completed.
- All Category 1 appliances are checked for draft pressure.
- Flame interference indicates a hole in the heat exchanger. Verify heat exchanger integrity.
- Category 3 and 4 appliances are not checked for draft pressure, as they are positive pressure vents.
- Sealed combustion appliances are not checked for vent pressure.
- All appliances are checked for Carbon Monoxide (CO)

Note: It is a good idea to have the CO meter between your nose and the draft hood when measuring ambient CO on start-up of an appliance. Think safety. Understand the concept of establishing flow. The

Unit has to start a flow up the vent or you must abort the test for your own safety. If the unit cannot establish flow, lose the "worst case" conditions and try again. Initial combustion safety testing must be completed. Think of the test as a 5 second, 2 minute, 5-minute test.

19) Combustion Analysis

Perform a combustion analysis with the furnace operating at steady state upon inspection. If a cleaning or any adjustments are made, also do a post tune and clean combustion analysis. Record the following readings from the analyzer:

- Carbon monoxide (as measured)
- Oxygen
- Carbon dioxide
- Excess air
- Steady state efficiency
- Stack temperature

20) Furnace Operational Testing

Temperature Rise:

Measure the temperature rise across the heat exchanger after 5 minutes of operation. Adjust the motor speed if required.

- Adjust the motor speed so the temperature rise across the heat exchanger is as follows:
 - On a draft hood equipped appliance- toward the low end to middle of the temperature rise range listed on the data plate if possible.
 - On a mid-efficiency 80% draft induced appliance -within the middle third of the temperature rise range listed on the data plate if possible. Mid-efficiency 80% appliances are prone to condensation issues in the heat exchanger if they are under fired or have too much air flow.
 - If there is no nameplate, try to move as much air as possible and always keep the temperature rise below 90 degrees F.
- If the motor speed has been increased by adjusting the pulley on a belt drive blower assembly, or by increasing pulley diameter, then the amperage of the motor must be measured and must be within nameplate specifications.
- If the temperature rise is greater than the maximum temperature rise listed on the data plate after cleaning and adjustments have been made, static pressure testing must be performed to determine corrective measures.

Pilot Safety:

The pilot safety system can also easily be tested during the burner clean and tune procedure.

- Test for correct operation of space heating equipment standing pilot safety systems and repair as necessary. L.P. gas appliances have an operational 100% shut-off pilot safety system.

High Temperature Limit:

This test must be performed on the primary limit control of all gas heating appliances that have them.

- The primary high temperature limit switches must shut down the burners if the unit overheats.
- The blower must continue to operate when the limit trips.
- The limit switch must reset and the burners re-ignite before turning down the thermostat.
- Abort the test if the temperature in the limit testing location exceeds 225° Fahrenheit.
- Test can be done by disabling the blower or by "starving" the return air to the furnace.

Note: Think of this as a three part test. First, the limit should shut the gas off when the unit overheats.

Second, the blower must be proved to see that it still operates when the gas shuts off. Third, the limit must reset as the unit cools off and the burners should re-ignite before the thermostat is satisfied.

Fan Switch:

For efficiency reasons, the fan switch is adjusted to get the blower to come on sooner and stay on longer.

- With temperature actuated fan switches adjust the fan off temperature as close to 90° Fahrenheit as possible.
- With time on circuit board switches adjust the time off delay to achieve a fan off temperature of 20° F above the measured return air temperature if possible.
- If available, adjust the fan on time to make the blower come on as soon as possible.

21) Clocking the gas meter:

This can be a vital piece of information in diagnosing furnace problems. Measure appliance input. If this is a propane furnace without a gas meter, measure the gas pressure and adjust to the manufacturers specifications and verify proper orifice size.

Procedure:

- Accurately time the number of seconds it takes for the smallest dial on the meter to flow two cubic feet, four revolutions of 1/2 cubic foot dial, 8 revolutions of the 1/2 cubic foot dial.
- Divide by four to get seconds for 1/2 cubic foot.
- Refer to the "meter clocking card" or the last page of this form to find the number of cubic feet of gas/hour the appliance is using.
- Another option to finding the cubic feet of gas/hour is to calculate the flow. Divide the total seconds for two cubic feet of flow into 7200 to attain the cubic feet of gas/ hour.
- Multiply the cubic feet/hr. by the Btu content per cubic foot of the gas in your area to get Btuh input.
- Compare to nameplate input.
- Use a manometer to adjust gas pressure to achieve correct input rating.
- Gas manifold pressure must be within 10% of manufacturers listed nameplate pressure.

- Measured Btu/hr. input must be within 5% of manufacturers nameplate input rating.
- Heating appliances are not to be over-fired.

22) Calculating air flow:

The information required to calculate the air flow has already been gathered in the inspection process.

The calculation is: $CFM = \text{Btuh output} / (\text{Temp. rise} \times 1.08)$

- Convert the Btuh input to output. Multiply the input by the efficiency.
 - Example: 70,000 Btuh 90% furnace: $70,000 \times .9 = 63,000$ Btuh output
- Apply the correction factor (1.08) to the temperature rise.
 - Example: 70° return, 125° supply = 55° temperature rise. $55 \times 1.08 = 59.4$
 - e Divide 63,000 by 59.4 = 1060 CFM

23) Measuring Static Pressure

Measuring static pressure is a valuable diagnostic procedure when it is determined there is an airflow issue with the system. The volume of air an air handler can deliver is affected by *the Total External Static Pressure* the blower is working against.

Most gas furnaces state on the nameplate; *Maximum External Static Pressure: .5 inches of water column.*

This means the maximum static pressure the furnace will deliver its rated air flow is .5 inches water column. Furnace manufacturers provide fan performance tables that will show what volume of airflow it will deliver at given static pressures. A gas furnace may work safely at static pressures greater than .5 inches if the temperature rise is still below the maximum rise listed on the nameplate. There are up to four common components that affect the total external static pressure:

- The supply duct static pressure
- The return duct static pressure
- The pressure drop across the coil
- The pressure drop across the filter

Static pressure shall be measured at four locations to gather the necessary information. Measure and record the four readings.

- Measure at the outlet of the coil, this is the *Supply Duct Static Pressure*.
- Measure at the supply outlet of the furnace, before the coil. This is the *Total Supply Static Pressure*. (if there is no coil, total supply static and supply duct static are the same)
- Measure at the blower component on the blower side of the filter. This is the *Total Return*

Static Pressure.

- Measure in the return duct for the *Return Duct Static Pressure*.

- Note: If the return system has a remote filter grille the static pressure drop across the filter will be measured by inserting the manometer probe through the filter and reading the pressure with reference to outside the filter. Subtracting this from the *Total Return*

Static Pressure will give the Return Duct Static Pressure

Calculate and record the following on the form:

1. Add the b) *Total Supply Static Pressure* to the c) *Total Return Static Pressure* disregarding the positive/negative. This sum is the *Total External Static Pressure*.
2. Subtract the a) *Supply Duct Static Pressure* from the b) *Total Supply Static Pressure*. This sum is the *Pressure drop across the coil*.
3. Subtract the d) *Return duct static pressure* from the c) *Total return static pressure*. This sum is the *Pressure drop across the filter*.

Note:

If airflow is low and *Total External Static Pressure* is high, look for the component(s) that have high static pressure and determine corrective action.

If airflow is low and *Total External Static Pressure* is low, the problem is internal to the furnace. (Dirty wheel, blocked secondary heat exchanger, weak blower motor)

- The Gas Appliance Inspection Form is formatted to allow for up to two appliances. Use the form as appropriate. Most situations will have just two appliances located in the same CAZ. There may be times when there are more than two appliances in the same CAZ or appliances that are isolated from each other in a different CAZ. If there are more than two appliances, use two forms or more ... etc.

The same thing applies to multiple Combustion Appliance Zones.

- All the testing on the Additional Appliance or CAZ pages is done in the same manner as previously outlined in this document.

24) Issues to be addressed / Comments / Signatures

- Use this section to document needed/performed work on the building and any appropriate information that needs to be shared with the Auditor and Technician.
- This would be a good place for contractors to document any repairs that may require billing above the cost of a standard inspection or clean and tune.
- Document any pertinent information about the appliances being inspected keeping in mind that the form will be reviewed by a third party. The Inspection form should contain sufficient information for competent review.
- Appropriate names and dates must be on the form for proper review. It should be clear which person performed each task associated with the form.
- All technical forms should undergo review by a competent Agency person before they are filed away upon completion of the jobs. This helps to make sure nothing is missed and quality is assured.

Client Education:

Client education is an important aspect of the process to try to ensure that measures taken during the WX process will continue to provide comfort, safety and efficiency long after we leave.

- Discuss energy savings potentials of setting back the thermostat, changing the air filter and turning down the water heater temperature.
- Fire the appliance during client education to make sure it cycles properly before you leave.

APPENDIX L: Unvented Gas Heater

Unvented Gas Space Heater Inspection Form

DOE strongly encourages removal of all unvented- and liquid –fueled space heaters and replacement with vented, code compliant heating systems as a prerequisite to weatherization. DOE will allow unvented gas- or liquid fueled space heaters to remain as secondary heat sources provided they comply with IRC and the IFGC. DOE is allowing this flexibility primarily to provide low-income clients an emergency back-up source of heat in the event of electrical power outage. Reference: Weatherization Program Notice 11-6 for complete agency compliance.

Space heater does not exceed 40,000 BTU's	TRUE FALSE
Not located in, or obtains combustion air from bedrooms, bathrooms, or storage area.	TRUE FALSE
Meets the minimum ventilation rating guidelines for combustion appliances.	TRUE FALSE
DOE funds are not being used to replace this secondary heat source.	TRUE FALSE
Unvented space heater has an oxygen-depletion sensing safety shut off system.	TRUE FALSE
Unvented space heater is not being installed into a mobile home.	TRUE FALSE
Smoke and carbon monoxide detectors are within 15 feet of unvented space heater.	TRUE FALSE
Client education on the use of the unvented space heater is emergency back-up only.	TRUE FALSE
Client education given to leave a door or window open during use of the space heater.	TRUE FALSE
Client education on the dangers, health and safety concerns was performed.	TRUE FALSE
C/O test performed 6 to 9 inches above the unvented space heater burner(s).	TRUE FALSE
C/O did not exceed 9 PPM after 5 minute test. C/O level measured. _____ PPM	TRUE FALSE
If FALSE is marked in any of the area's this space heater is unsafe to leave.	Passed _____ Failed _____

If the unvented space heater fails inspection removal, replacement with a vented space heater or deferral of the home is required. No additional work is to proceed until corrections are made.

Signing below is acknowledging this unvented space heater passed inspection and client agrees to the following conditions.

Model Number _____ Serial Number _____

I _____ agree to the outlined safety concerns and operational precautions' when this unvented space heater is used, including opening a window or exterior door. I also understand by not allowing the weatherization department remove this unvented space heater(s) all liability for any moisture issues; resulting from the un-vented gas products venting directly into my home, fire, health or even death of occupant(s) will be solely my responsibly and will not hold any employee, or affiliate of this agency liable.

I understand and will comply with the above statement. _____

Date signed. _____

Auditor Signature _____ Date of inspection _____

APPENDIX M: Moisture Assessment

INDIANA WEATHERIZATION PROGRAM

Client Name: _____

Address: _____

The purpose of the Indiana Weatherization Assistance Program is to increase the energy efficiency of dwellings owned or occupied by low income persons, reduce their total residential expenditures, and improve the health and safety of the building and its occupants. This moisture assessment, as part of overall building analyses, documents existing moisture issues before weatherization was performed and identifies issues that must be addressed by the property owner before work can begin on the dwelling.

Items checked on this form have been identified as potential issues in your home.

1. MOISTURE AREAS

Existing conditions (check all that apply)

- _____ Damp atmosphere in house
- _____ Client complaint of allergy-like symptoms
- _____ Visible mold growth (if yes - go to #2)
- _____ Evidence of water penetrating the home (stains, moist areas)
- _____ Evidence of conditions that might allow water in the home (poor grading, bad flashing, bad/missing gutters)
- _____ Actual construction defect or deterioration that allows water into the home (roof, decks, windows concrete slabs, lack of vapor barrier)
- _____ Plumbing defects (leaking drains, pipes or toilet seals, missing caulk on sinks or tubs)
- _____ HVAC problems (dirty, moist filters, poor condensation drainage)
- _____ Dryer vented indoors, inadequate ventilation for a kitchen, bath or other high moisture area
- _____ Any source of condensation

2. MOLD/MILDEW AREAS

	Existing Mold/	Sq Ft NOTES
Mildew of area		
_____ Primary bath	_____	_____
_____ Second bath	_____	_____
_____ Kitchen	_____	_____
_____ Laundry area	_____	_____
_____ Basement walls	_____	_____
_____ Basement shower stall	_____	_____
_____ Crawlspace	_____	_____
_____ Exterior walls	_____	_____
_____ Attic/Ceilings	_____	_____
_____ Other _____	_____	_____

3. UNSANITARY CONDITIONS (may cause odors, viruses or bacteria in house)

NOTES

- _____ Insect pests in work area
- _____ Excessive animal feces/carcasses in work area
- _____ Excessive bird/bat feces/carcasses in attic
- _____ Raw sewage in house/basement/crawlspace

Additional Comments related to Health and Safety issues: _____

These are the existing conditions as of the date below. Weatherization will / will not be able to proceed due to items identified on this form.

Client Signature Date

Agency Representative Agency Phone Number Date

The moisture assessment findings completed by the Building Analyst on _____ do / do not reflect current moisture issues found in the dwelling on _____. Any changes to the original assessment have been noted and initialed by the appropriate Building Technician.

Certified Building Technician

Date

SIGNED COPY IS TO BE LEFT WITH CLIENT AND PLACED IN FILE

Daily Safety Test-Out Summary Sheet

Client name: _____ Job #: _____

Revised 11/19/10

Test Set Up

	Day 1	Day2	Day3
Turn all combustion appliances off or to pilot	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Remove forced air furnace filter	<input type="checkbox"/> N/A <input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Close all exterior doors, windows and other openings	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Close fireplace or woodstove dampers	<input type="checkbox"/> N/A <input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Turn on clothes dryer and all other exhaust fans (Clean dryer lint trap and use a "no heat" setting) (Includes power attic ventilators) (Do not operate whole house exhaust fans)	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Open supply registers (Close supplies in CAZ)	<input type="checkbox"/> N/A <input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Interior door position:			
Fan Off – Close all doors except to rooms with exhaust fans	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Fan On – Smoke doors to rooms with exhaust fans	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Blower door used to simulate 300 CFM fireplace flow?	<input type="checkbox"/> N/A <input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes

CAZ Depressurization Test

Gauge set up to measure CAZ WRT outside?		<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes
Technician: _____				
Date: _____				
	CAZ Door		CAZ Door	
	Open	Closed	Open	Closed
Furnace fan: Off	_____ Pa	_____ Pa	Off	_____ Pa
Furnace fan: On*	_____ Pa	_____ Pa	On	_____ Pa

* Reposition doors as needed

Recreate conditions which caused the greatest negative pressure in the CAZ

Appliance Testing

Water Heater: (Test the lowest Btu/hr input appliance first)			
Fire the water heater	Day 1	Day2	Day3
Was initial flow established in the vent? (5 sec)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did spillage disappear within 2 minutes?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Draft pressure after 5 minutes:	_____ Pa	_____ Pa	_____ Pa
Furnace/boiler/space heater:			
Fire the heating appliance	Day 1	Day2	Day3
Was initial flow established in the vent? (5 sec)	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Did spillage disappear within 2 minutes?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Retest of smaller appliance: Spillage	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Draft pressure	_____ Pa	_____ Pa	_____ Pa
Furnace draft pressure after 5 minutes:	_____ Pa	_____ Pa	_____ Pa
Outdoor air temperature:	_____ °F	_____ °F	_____ °F

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APPENDIX O: Electric Heat Inspection



**INDIANA COMMUNITY
ACTION ASSOCIATION**
Taking Action. Improving Lives.

Electric Heat Inspection Form

Revised September 2012

Audit Date: _____

Existing furnace ☐ New Furnace ☐

Job/Client Information

Client name: _____ Client/Job number: _____

Phone: _____ Home: _____

Work: _____

Address: _____ Cell: _____

Equipment Information

Primary Heat Source: ☐ Heat Pump ☐ Electric furnace ☐ Baseboard ☐ Cable ceiling

Auxiliary Heat ☐ Electric ☐ Gas ☐ Oil Other: _____

If there are gas or oil appliances, include appropriate forms

Application: ☐ Up flow ☐ Down flow ☐ Horizontal ☐ Site-built ☐ Mobile home

Heat Pump Information:

Make: _____ Model: _____

Serial: _____ Btuh: _____

Furnace Information:

Make: _____ Model: _____

Serial: _____ Btuh/Kw: _____

Coil Information(if coil is separate from furnace, e.g., heat pump with gas or oil furnace)

Make: _____ Model: _____

Serial: _____

		Auditor		Tech		Final
		NA	Y N	Y N	Y	Y
Service disconnect/breaker in unit, or within reach of unit		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Breakers/fuses correct size		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conductor(s) correct size		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Terminals/connections tight and good condition		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wiring dark, discolored or burnt		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unit properly grounded		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All elements operational		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sequencer/heat relay/board operating properly		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All elements on for 5 minutes		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Blower on with first element, off with or after last		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Element Amperage:	Auditor: E1: _____ E2: _____ E3: _____ E4: _____ E5: _____					
	Tech: E1: _____ E2: _____ E3: _____ E4: _____ E5: _____					
	Final: E1: _____ E2: _____ E3: _____ E4: _____ E5: _____					

Airflow Calculation

$$CFM = Btuh \text{ output} \div (\text{temperature difference} \times 1.08)$$

Final airflow cfm must be calculated after duct sealing is performed

	Inspection	Technician	Final
Total amps of elements :	_____ amps	_____ amps	_____ amps
Voltage applied:	_____ volts	_____ volts	_____ volts
Multiply volts and amps	0 _____ watts	0 _____ watts	0 _____ watts
Multiply watts x 3.413	0 _____ Btuh	0 _____ Btuh	0 _____ Btuh
Supply air temperature:	_____ °F	_____ °F	_____ °F
Return air temperature:	_____ °F	_____ °F	_____ °F
Temperature rise	0 _____ °F	0 _____ °F	0 _____ °F
Temp rise x 1.08	0 _____ °F	0 _____ °F	0 _____ °F
Divide Btuh output by the adjusted temp rise	_____ cfm	_____ cfm	_____ cfm

Minimum airflow for heat pump system 400 cfm per ton

Blower, Coil, Ducts and Electric Water Heater

Blower clean

Filter clean, supported and user friendly

Coil and condensate drain pan clean

Secondary drain pan installed if above finished ceiling

Condensate drain trapped and terminated properly

Ducts outside thermal/pressure boundary sealed

Ducts outside thermal/pressure boundary insulated

Water heater level and free of leaks

T & P correct and properly piped

Water temperature set to 120 °F or less

Record water temperature

	Auditor		Tech		Final
	NA	Y N	Y N	Y	
Blower clean					
Filter clean, supported and user friendly					
Coil and condensate drain pan clean					
Secondary drain pan installed if above finished ceiling					
Condensate drain trapped and terminated properly					
Ducts outside thermal/pressure boundary sealed					
Ducts outside thermal/pressure boundary insulated					
Water heater level and free of leaks					
T & P correct and properly piped					
Water temperature set to 120 °F or less					
Record water temperature					
	_____ °F		_____ °F		_____ °F

Baseboard and Ceiling Cable Heat

All base board heaters and ceiling cable heaters operational

All base board heaters clean and free of obstructions

All base board covers in place

Properly sized breaker panel and circuit breakers

	Auditor		Tech		Final
	NA	Y N	Y N	Y	
All base board heaters and ceiling cable heaters operational					
All base board heaters clean and free of obstructions					
All base board covers in place					
Properly sized breaker panel and circuit breakers					

- Heat pump level and elevated above snow grade
- Entire vapor line insulated
- Outdoor coil clean
- Terminals, connections, wiring tight and good condition
- Crankcase heater or trickle circuit functional
- System wired to stage auxiliary heat correctly
- Reversing valve operational
- Outdoor metering device ☐ Expansion valve
- Indoor metering device ☐ Expansion valve

[illegible]

Only EPA Section 608 CFC certified technicians are permitted to attach gauges to systems

System tested in heating or cooling? ☐ Heat ☐ AC ☐ Heat ☐ AC ☐ Heat ☐ AC

Outdoor temperature °F °F °F

Inspection

Liquid line pressure	N/A	psig	_____	psig	N/A	psig
Saturation temperature	N/A	°F	_____	°F	N/A	°F
Liquid line temperature	N/A	°F	_____	°F	N/A	°F
Calculated subcooling	N/A	°F	0	°F	N/A	°F
Required subcooling	<input type="checkbox"/> NA	N/A	_____	°F	N/A	°F

Suction pressure	<u>N/A</u>	psig	<u> </u>	psig	<u>N/A</u>	psig
Saturation temperature	<u>N/A</u>	°F	<u> </u>	°F	<u>N/A</u>	°F
Suction line temperature	<u>N/A</u>	°F	<u> </u>	°F	<u>N/A</u>	°F
Calculated superheat	<u>N/A</u>	°F	<u>0</u>	°F	<u>N/A</u>	°F
Required superheat	<input type="checkbox"/> NA	<u>N/A</u>		°F	<u>N/A</u>	°F

Dry bulb return air		_____ °F	_____ °F	_____ °F
Wet bulb r/a (superheat charging)	<input type="checkbox"/> NA	_____ °F	_____ °F	_____ °F
Supply air temperature		_____ °F	_____ °F	_____ °F
Temperature rise or drop(dry bulb)		0 °F	0 °F	0 °F

	Auditor		Tech		Final
	NA	Y N	Y	N	Y
If in heating mode, meets factory charging specifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meets expected indoor temp rise $\pm 2^{\circ}\text{F}$: $(\text{ODA}^{\circ}\text{F} \times .33) + 9^{\circ}\text{F}$	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Meets expected indoor temp drop (14°F to 22°F dry bulb)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Heat pump indoor temp rise when 32 °F outdoor = 18-20°F, add/subtract 1° rise for every 3° ± outside

Mechanical Work

			Completed		
1		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
2		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
3		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
4		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
5		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
6		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
7		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
8		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
9		Y	<input type="checkbox"/>	N	<input type="checkbox"/>
10		Y	<input type="checkbox"/>	N	<input type="checkbox"/>

Additional Comments: _____

Audit performed by: _____ Date: _____

Mechanical work performed by: _____ Date: _____

Mechanical inspection performed by: _____ Date: _____

Final inspection performed by: _____ Date: _____

Agency reviewer: _____ Date: _____

APPENDIX P Intentionally left Blank

APPENDIX Q: Deferral Form

Revised March 2015

Weatherization Assistance Program Deferral Notification Letter

Date

Sub-grantee name

Sub-grantee address

Sub-grantee contact person & phone number

Client name

Client address

Dear _____,

This letter is to inform you that your home is being deferred from receiving Weatherization Services at this time for the following reason(s):

_____ Mold or moisture problems beyond the scope of Weatherization to repair or remediate

_____ Roof leaks

_____ Excessive carbon monoxide levels beyond the scope of Weatherization to remediate

_____ Existing sanitary or sewage issues beyond the scope of Weatherization to repair or remediate

_____ Structural issues beyond the scope of Weatherization to repair

_____ Lead based paint conditions beyond the scope of Weatherization to repair or remediate

_____ Household issues hindering attempts to provide or complete Weatherization services

_____ Home is for sale or under foreclosure proceedings

_____ Any condition that threatens the health and safety of the client or those working in the home

_____ Other – Please Specify Below

Client Instructions, Timelines and Notes

In order for Weatherization services to be provided to your home, the above mentioned items must be repaired or remediated no later than _____. Once the above mentioned items have been properly addressed (sub-grantee name) will return to your home to determine if Weatherization Services can be provided.

If you are in disagreement with this deferral and wish to appeal this decision, you must first submit your request for appeal along with the reasons for your disagreement in writing to (sub-grantee executive director) at _____ within ten (10) days of receipt of this letter.

If you are in disagreement with the determination of (sub-grantee executive director) you may appeal their decision, in writing, to the Indiana Housing and Community Development Authority (IHCDA) by contacting Ms. Donna Billiard Wright, Chief Community Programs Officer. Any appeal to IHCDA must be submitted within ten (10) days of the date of the determination by (sub-grantee name). IHCDA will review the deferral and render a decision. IHCDA's decision will be considered final. Appeals to IHCDA are to be sent to the following address:

IHCDA

Attn: Ms. Donna Billiard Wright

30 South Meridian Street

Indianapolis, IN 46204

Sub-grantee Signature: _____

Date: _____

(Title)

APPENDIX R: Zero Income Affidavit

IHCDA Energy Assistance Program Zero Income Affidavit

I, _____, hereby certify under the penalties of perjury and fraud the following: (1) I have not received any income¹ in the past twelve (12) months prior to this date; (2) I do not have any additional proof of income; and (3) the information that I have provided in this affidavit is true and accurate. In addition, I authorize state and federal agencies to verify any of this information and hereby consent to the release of my Indiana Tax Return for this purpose. My household living expenses have been met over the past twelve (12) months as follows:

Housing Assistance: _____ Date Received: _____
Source of Assistance/Name: _____

Utility Assistance: _____ Date Received: _____
Source of Assistance/Name: _____

Food Assistance: _____ Date Received: _____
Source of Assistance/Name: _____

Cash or Other Assistance: _____ Date Received: _____
Source of Assistance/Name: _____

I acknowledge that 18 U.S.C. § 1001, "Fraud and False Statements," provides among other things, in any matter within the jurisdiction of the executive, legislative, or judicial branch of the Government of the United States, anyone who knowingly and willfully: (1) falsifies, conceals, or covers up by any trick, scheme, or device a material fact; (2) makes any materially false, fictitious, or fraudulent statement or representation; or (3) makes or uses any false writing or document knowing the same to contain any materially false, fictitious, or fraudulent statement or entry; shall be fined under this title, and/or imprisoned for not longer than five (5) years.

Date: _____

Signature of Zero Income Claimant

NOTARY ACKNOWLEDGEMENT

WITNESS my hand and seal this _____ day of _____ 201__.

My County of Residence: _____
Notary Public -Signature

My Commission Expires: _____
Notary Public -Printed Name

HEAD OF HOUSEHOLD AND AGENCY SIGNATURES

_____ Date: _____
Head of Household Signature

_____ Date: _____
Agency Representative Signature

¹ Examples of different types of income: gross wages, salaries, commissions, bonuses, profit sharing, cashed out vacation or sick pay, and tips of an employee, income received in installments from the sale of property, profits or gains from the sale of assets, Black Lung Pension Disability payments, disability payments from insurance, dividends, interest, gambling winnings, pensions, railroad retirement benefits, military allotments, regular life insurance payments, worker's compensation, veterans benefits, unemployment compensation, TANF, strike benefits, social security benefits, and royalties.

Certificate of Insulation

Client Name and Address:

Name & Address of Contractor:

Ceiling	Sidewalls	Foundation	Box Sills	Ducts
Sq. Ft. _____	Sq. Ft. _____	Sq. Ft. _____	Linear Ft. _____	Linear Ft. _____
Type of Insulation _____	Type of Insulation _____	Type of Insulation _____	Type of Insulation _____	Type of Insulation _____
Manufacturer _____	Manufacturer _____	Manufacturer _____	Manufacturer _____	Manufacturer _____
R-value Installed _____	R-Value Installed _____	R-Value Installed _____	R-Value Installed _____	R-Value Installed _____
#Bags _____	#Bags _____			

Existing Insulation:

Type	Inches
Ceiling _____	_____
Sidewalls _____	_____
Foundation _____	_____

I certify that the residence above was insulated as specified. I further certify that the installation of the insulation conforms to all applicable codes, standards and regulations.

Authorized Signature

Date

APPENDIX T: 62-2 updated 2014, Testing 06

Can be found online <http://intelligentweatherization.org/weatherization-forms/>

SAVE ENERGY ON YOUR OWN

Electricity Use Savings & Safety

▪ Easy

1. Check the seals in your refrigerator(s) – Close the door on a piece of paper and then try to pull it out. If it comes out easily the seal is bad and is letting hot air into the refrigerator causing the refrigerator's compressor to run more often. **FIX:** Replace the seal.
2. Check the contents of your refrigerator(s) – Freezers work better when they are full, and refrigerators work best when the air can flow freely within them. So check to make sure your freezer(s) are full, and that nothing is blocking the air flow within your refrigerator (especially on the top rack.) **FIX:** rearrange items in the refrigerator to promote air flow, and fill the freezer with food or empty bottles filled with water.
3. Keeping refrigerators too cold costs money. Proper temperatures: 37-40 degrees for fresh food and between 0-5 degrees in your freezer. Easy way to check: put one thermometer in a glass of water in the center of the refrigerator, and another between packages in the freezer – read after 24 hours.
4. Check your computers' power management settings – If you leave your computer and monitor on all the time, you are wasting a significant amount of energy. You can find the power management settings under the Control Panel. **FIX:** Have the computer go into hibernate mode after 30 minutes of inactivity (this mode saves your current working environment to the hard drive and then shuts down.)
5. Check your lighting – Determine which lights you use most and look at the wattage of the bulbs. **FIX:** Lower the wattage of the bulbs in your most used areas (seriously consider using CFLs or LED lights to significantly reduce the wattage.) Also, make sure you turn off lights in rooms that you are not using – this is the simplest and cheapest way to start saving on your lighting.
6. Clean your dryer's lint filter after each use.
7. Dry consecutive loads to get the most from heat retained in the dryer.
8. Use your microwave and save up to 75% of the energy.
9. Vacuum the cooling coils on your refrigerator to remove dust.
10. Select the “air dry” cycle or simply turn the dishwasher off after the dishes have been washed.

▪ Moderate

1. Check the coils on your refrigerator(s) – This usually requires you to pull the refrigerator out, since the coils will be located on the back or bottom of the unit. If the coils are dirty and covered with dust and grim, the refrigerator compressor needs to run longer to keep the inside cold. **FIX:** Cleaning the coils and underside of the refrigerator with a vacuum or broom.
2. Check your appliances – Older models use considerable more energy than the newer energy efficient models (if you have a Kill-a-Watt Meter you can check exactly how much electricity they are using.) **FIX:** Replace worn out appliances and begin to use appliances more efficiently (i.e. only run full loads of laundry and dishes.)

❖ Safety

1. Routinely check wires, extensions cords, and appliance cords for signs of wear (they should not be cracked or frayed)
2. Use plastic safety caps in electrical outlets when there are small children in the home.
3. Do not touch appliances, wires or electrical switches with wet hands.
4. Do not insert metal objects into an appliance (ie: knife into a toaster) without unplugging it first.

▪ **Easy**

1. Check for air leaks around windows and doors – On a cold and windy day, feel around your windows and window moldings for air infiltration. If you are having trouble feeling for leaks, you can use a stick of incense to detect the leaks. Find the places where the smoke gets disturbed by air leaking into your home. **FIX:** Caulk all places where air is leaking into your home.
2. Check the insulation level in your attic – Since heat rises, having the recommended level of insulation in your attic goes a long way at keeping the heat within your home. stick a ruler or yardstick into the insulation to determine the depth. Depending on your location you should have between 12 to 24 inches of fiberglass, or 10 to 20 inches of blown cellulose insulation. **FIX:** Add more insulation, either batts or blown in insulation.
3. Check your furnace's air filter – Always remember to check the air filter on your furnace at least once a month. A dirty filter will make the furnace work harder and longer, shortening its life. **FIX:** replace dirty air filter.
4. Check heating registers – Make sure that nothing is blocking the heating registers. **FIX:** Move furniture off all heating registers.
5. Check thermostat – For each degree you can turn down the thermostat, you will save 3% on your heating costs. **FIX:** Turn the thermostat down when you are not home and when you are sleeping. Replace your standard thermostat with a programmable one, and let it do all the work.
6. Keep outdoor units clean and clear of leaves and debris.
7. Install foam insulator pads between electrical outlets and switch plates.
8. Keep windows and doors closed, especially the outside doors of attached garages.

▪ **Moderate**

1. Check for air leaks into the attic. Look for places where the insulation is a darker color. This can indicate a leak that is blowing dust into the insulation. Also look around the tops of walls, above lights, and wherever wires, pipes, and duct work enter the attic. These air leaks are pulling the heat right out of your home. **FIX:** Seal leaks with spray foam, rope caulking, and plumber's putty. Be careful to keep flammable materials away from any chimneys or can lights. To seal these you will have to use a high temperature caulking.
2. Check duct work for leaks – If your duct work goes into the attic or any unconditioned space, check to make sure it is insulation and that there is no air leaks. **FIX:** Seal the duct work with metal duct tape (do not use standard duct tape – it will deteriorate too quickly.) and then wrap the ducts in insulation.

❖ **Safety**

1. **Do not use gas, wood, or kerosene heaters unless all gases are vented to the outside.**
2. **Do not place space heaters near drapes or furniture that can catch fire. Place space heaters on non-combustible surfaces – like a sheet of metal.**
3. **Do not use the cook stove/oven to heat your home.**
4. **Install smoke detectors and carbon monoxide alarms – if the carbon monoxide alarm goes off, call your fuel company immediately.**

▪ **Easy**

1. Your water heater is the second biggest energy user in the home. Check your water heaters temperature setting – Most water heaters can be set to 120 degrees. **FIX:** Lower you water heaters temperature to 120 degrees – For each 10 degree reduction, you will save 3% to 5% on your energy costs.
2. Check your faucets – Look for leaks – a leaking faucet can waste gallons of water a month. **FIX:** Replace or repair leaking faucets.
3. Check your toilets for leaks – Add a little bit of blue food color to the tank to test if the flapper is leaking.

Leave the toilet for 30 minutes and then check to see if any of the blue water has leaked into the bowl. If it has the flapper is leaking and wasting your water. **FIX:** replace the flapper.

4. Take showers instead of baths and save 50% of the energy.

❖ **Safety**

1. **To avoid the potential for minor burns, do not set your hot water heater temperature any higher than 120 degrees.**

Fireplace Energy Savings & Safety

1. Have your fireplace and chimney serviced annually by a certified chimney sweep.
2. **Close your doors.** When burning a fire, be sure to shut the doors to the room in which the fireplace is located. Doing so will keep that room heated and prevent a roaring fire from drawing warm air out of the rest of your house and replacing it with cold air from outdoors. Also crack open one nearby window to give the fire just enough air to burn.
3. Burn only hard woods such as oak or hickory. Soft woods like pine, lumber scraps, etc., do not burn as hot, leaving soot and combustibles on the chimney lining. This can cause a chimney fire.
4. Be totally certain that the fireplace assembly is in good structural condition. No voids, cracks, or openings in the chimney can be accepted.
5. Clean ashes out of firebox prior to use, making sure there are no hidden embers.
6. Buy a great grate. All fireplace grates are not created equal. Ensure that yours either holds logs in a manner that maximizes heat flow to your room or has C-shaped parallel tubes that point toward the room, sucking in cool air and recycling it back into the indoor environment once it has been heated by the fire
7. Seal it up. Applying caulk manufactured for use around the hearth and firebox is another simple, inexpensive way to keep cool air out and warm air in.
8. Be sure the damper is operating the way it is supposed to operate and keep closed when you aren't using the fireplace to keep out cold air.
9. When installing/replacing the doors on the front of a pre-fabricated fireplace, check that the proper doors listed for that fire place are used. Numerous fires have occurred from installing improper doors, causing an excess of heat build-up and resulting in a fire in the wall behind and above the fireplace.

❖ **Safety**

1. Never use flammable or combustible liquids to start or accelerate your fire.
2. Make sure a screen or glass door covers the opening. Sparks will shoot out of the fire box and cause a fire.
3. Dispose of cold ashes in the proper manner

APPENDIX V: Home Heating Index Calculation

Billing Analysis data collection

Pre Wx Home Heating Index

Name:	
Address:	
Phone:	
Gas Utility:	
Account#:	
Ele Utility:	
Account#:	
Auditor(s):	

Monthly Consumption

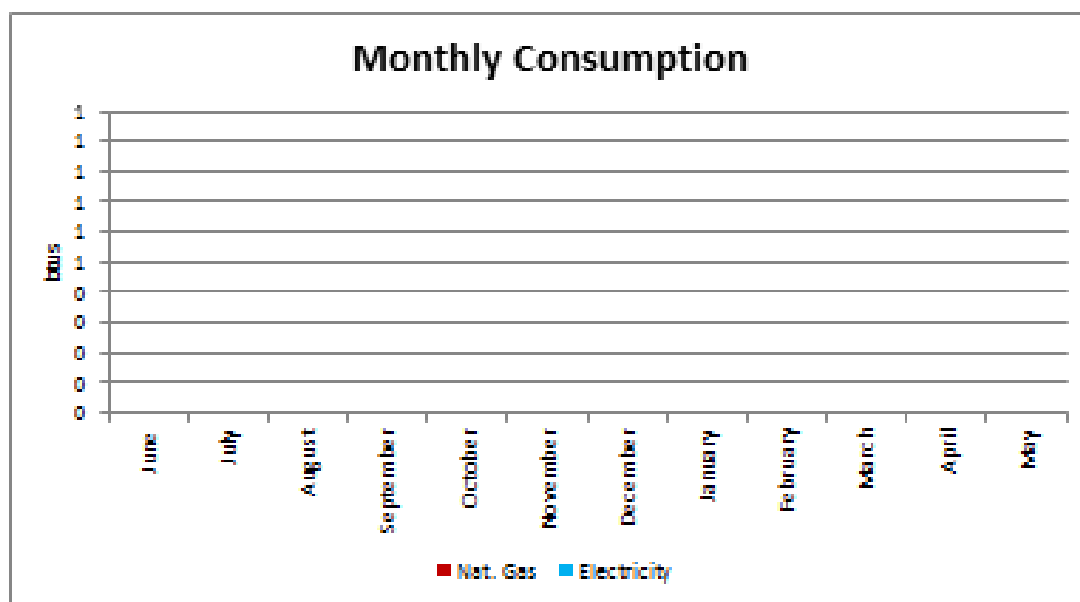
	Nat. Gas	Electricity
June		
July		
August		
September		
October		
November		
December		
January		
February		
March		
April		
May		
Annual	0	0
House sqft		
HHI	.	.

County:

Primary Fuel:

Approximate Home Heating Index

600 sqft	#NUM!
700 sqft	#NUM!
800 sqft	#NUM!
1000 sqft	#NUM!
1200 sqft	#NUM!
1500 sqft	#NUM!
2000 sqft	#NUM!
2500 sqft	#NUM!



APPENDIX W: Deferral Closeout Form

INDIANA'S HEALTHY HOMES PROGRAM FUNDING APPLICATION 2015									
Agency Legal Name:									
Client Name	County	Matrix Points	Date of Initial Visit	Date of Deferral	List all measures necessary for the home to be ready for Traditional Weatherization services	Deferral Letter Attached (Y/N)	Moisture Assessment Attached (Y/N)	HHI value and Calculation form attached	Estimated Job Cost to Address Deferral Issues

APPENDIX X: Final Inspection Form
APPENDIX Y: SWS Approved Variances

Can be found at <http://www.in.gov/myihcda/weatherization.htm>

APPENDIX Z: Removal or Suspension of Contractor Policy

POLICY FOR THE REMOVAL/SUSPENSION OF CONTRACTORS **FROM THE IHCD A WEATHERIZATION ASSISTANCE PROGRAM ACKNOWLEDGEMENT FORM**

Overview:

A major goal of the IHCD A Weatherization Assistance Program (WAP) is that the homeowners receive services in a safe, effective and efficient manner. IHCD A's intent is that contractors that provide weatherization assistance services are qualified, competent and demonstrate a high degree of professionalism. To this end, IHCD A has developed a policy that detail's when a contractor can be disciplined and/or suspended from performing weatherization services that are funded through IHCD A's Weatherization Assistance Program. This policy shall apply to any contractor, contractor employees, or sub-grantee crew members that are providing weatherization services as a part of the Weatherization Assistance Program. Under this policy the contractor, contractor employees or sub-grantee crew members can be disciplined in the following manner: (1) denied participation until remedial training, as directed by IHCD A, is completed; (2) denied participation in the WAP for a period up to two (2) years; (3) suspended or debarred permanently under IHCD A's Suspension & Debarment Policy as described below. The following violations by contractors and/or crews can lead to disciplinary action.

Violations:

- A. Repeated occurrences of failed Combustion Appliance Zone (CAZ) testing resulting in re-work;
- B. Repeated occurrences of failing to properly complete required heating systems forms;
- C. Repeated monitoring findings related to the contractor or persons performing the work;
- D. Repeated incidents of unsatisfactory, sub-standard work performance;
- E. Repeated incidents of sub-grantee having to repay funds related to poor work performance by a contractor;
- F. Repeated incidents of violating IHCD A, DOE or LIHEAP program requirements;
- G. Fraudulent activity or fraudulent charges that are being reimbursed by the Weatherization Assistance Program; or
- H. Negligent work performance that leaves clients or other workers in imminent danger (Health and Safety- i.e., carbon monoxide allowed to enter the home or gas leak not addressed).

Consequences:

1. Remedial Training. A contractor or persons performing work that fall under any of the categories (A- B) will be recommended for remedial training and will be denied participation until remedial training is completed.
2. Denial of Participation. A contractor or persons performing work that fall under any of the categories (C-F) can be denied participation for up to 2 years.
3. Permanent Debarment. A contractor or persons performing work that fall under category (G and H) will fall under the IHCD A Suspension & Debarment Policy, which could lead to permanent debarment from providing weatherization services funded through IHCD A's Weatherization Assistance Program.

I acknowledge receipt of this document.

Signed: _____

Printed: _____

Date: _____